## **NEWS & EMERGING TECHNOLOGY**

## THE CARIBBEAN COMMUNITY CLIMATE CHANGE CENTRE (CCCC) UPGRADES RIEGL LIDAR SYSTEM

Riegl USA announced that the Caribbean Community Climate Change Centre (CCCCC), through the United States Agency for Aid and International Development (USAID)-funded Climate Change Adaptation Program (CCAP), has successfully completed an upgrade to its **Riegl VQ-880-G LiDAR System**. The purpose of the upgrade is to enhance the technical efficiencies and capabilities of the system to ensure continued relevance to planned activities and the quality of the system's outputs. The Centre's **airborne bathymetric laser scanning system** was upgraded with increased infrared channel performance, making it particularly suited for coastal mapping and in-land waterways and offers high-density topographic and bathymetric water depth measurement capability in shallow waters. As a result, the Centre has increased their capacity to meet the coastal topographic and bathymetric needs of the Caribbean Region and wider afield. **www.riegl.com** 





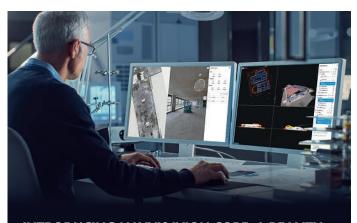
# HERE MARKETPLACE ADDS CUSTOMWEATHER DATA FOR INDUSTRIES TO BUILD LOCATION-AWARE, WEATHER-INTELLIGENT APPLICATIONS

HERE, the location data and technology platform, announced that CustomWeather has joined the HERE Marketplace, providing software developers seamless access to robust sets of **weather** and **climate data**. Weather conditions and environmental data are increasingly used by automakers, in transportation and logistics, and across supply chains to improve operations, driver safety and end-customer satisfaction. The HERE platform's Marketplace offers secure data exchange, essential location data and technology and a rich ecosystem of partners. With CustomWeather data multiple industries can develop businessenhancing solutions on the HERE platform. **www.here.com** 

## VERIDAAS INITIATES CALIFORNIA STATEWIDE LIDAR COLLECTION PROJECT

VeriDaaS announced that it has completed test flights necessary to begin its statewide California mapping project by acquiring high-density LiDAR elevation data on multiple areas of interest (AOIs). This data will be used for evaluation purposes by various state, federal and commercial stakeholders. In April 2021, VeriDaaS collected data at a minimum of 30 points per meter on a number of AOIs each with different terrain, vegetation and feature densities. These test flights will also be used to baseline sensor collection parameters to ensure the resulting data satisfies a wide range of use cases. The statewide California mapping project will support a wide range of use cases for both government and private enterprises. VeriDaaS continues to build out a coalition of private and public stakeholders to support funding of the project. This coalition will significantly lower the cost for all stakeholders while maximizing the return-on-investment and value of the data. www.veridaas.com



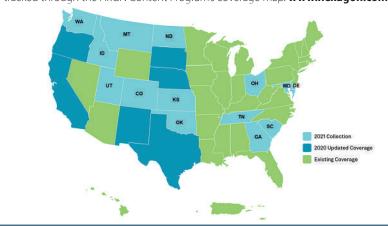


# INTRODUCING NAVVIS IVION CORE, A REALITY CAPTURE PLATFORM THAT ADDS MORE VALUE TO BUILDINGS AND ASSETS

NavVis, an innovator in mobile mapping and reality capture, announced the launch of NavVis IVION Core. Previously known as NavVis IndoorViewer, NavVis IVION Core is a **reality capture platform** where you can manage 3D scans with intuitive tools for creation, collaboration, and publication. NavVis IVION Core makes **mobile mapping workflows** more efficient, speeds up model creation and delivery, and adds value to data. The enhancements in NavVis IVION Core are expressly designed to support laser scanning service providers, surveyors, and AEC Companies. These include **multi-site functionality**, updated user management, and site coordinate systems for survey-grade geo-registration of data. **www.navvis.com** 

### HXGN CONTENT PROGRAM TO COLLECT NEW SINGLE-SEASON AERIAL DATA OF 14 U.S. STATES THIS YEAR

Hexagon's Geosystems division announced that the HxGN Content Program, Hexagon's aerial data program, will update 14 U.S. states in the 2021 collection season, including Tennessee, South Carolina, Oklahoma, Idaho, Maryland, Ohio, Delaware, Montana, Utah, Kansas, Washington, North Dakota, Georgia, and Colorado. Additional states will be added as the season progresses. The states will be refreshed at the program's **standard 12-inch state-wide updates**, as well as select states enhanced to 6-in resolution state-wide. The acquisition adds **888,035 square miles** of 4-band aerial imagery and digital elevation data to the program's existing collection of over **9 million square miles** across North America and Europe. The refreshed data will come online starting in Q3 as weather conditions allow. Availability of the 2021 data can be tracked through the HxGN Content Program's coverage map. **www.hexagon.com** 



## HAWKEYE 360 LEVERAGES MACHINE LEARNING FROM AWS TO OPTIMIZE MARITIME SECURITY AND VESSEL MONITORING CAPABILITIES

HawkEye 360, the first commercial company to use formation-flying satellites to create a new class of radio frequency (RF) data and analytics, announced the development of new maritime security and vessel monitoring capabilities that combine HawkEye 360's powerful RF geolocation services with a customized machine learning model developed through Amazon Web Services' (AWS) Machine Learning (ML) Solutions Lab. The capabilities, which will be integrated into the HawkEye 360 portfolio of products, leverage underlying vessel characteristics and behaviour to predict whether a given vessel is likely to engage in similar activity as sanctioned vessels. HawkEye 360 used Amazon SageMaker Autopilot — a fully managed service that helps make it easy to build, train and deploy ML models quickly — to develop the purpose-built, proprietary algorithms undergirding the new capabilities. www.he360.com

## GEOCUE UPGRADES SURVEY-GRADE UAS LIDAR/IMAGING SYSTEMS WITH TRUE VIEW 635/640

GeoCue Group has updated its Riegl-based True View 3D Imaging Systems (3DIS) with the launch of the new **True View 635/640 3DIS**. GeoCue's True View 3DIS family brings a unique combination of fused LIDAR sensors and photogrammetric cameras in a fully calibrated platform, allowing direct generation of high accuracy, colorized LIDAR data in less time than is required to fly the mission. GeoCue's first

generation of **Riegl miniVUX-2UAV-based 3DIS integrated systems,** the True
View 615 and 620, introduced compact,
survey-grade 3DIS providing high network
accuracy and precision (low noise).
Combined with GeoCue's integrated data
processing software suite, True View EVO,
all GeoCue 3DIS include the full postprocessing software workflow, including
direct integration with Applanix POSPac.



www.geocue.com

## AMAZON WEB SERVICES BECOMES USGIF STRATEGIC-LEVEL MEMBER

The United States Geospatial Intelligence
Foundation (USGIF) welcomed Amazon Web
Services (AWS) as its newest Strategic-Level
Member. AWS is the latest company to join the
growing list of USGIF organizational members
and is its 27th Strategic-Level Member. AWS
is a cloud platform, offering over 200 fully
featured services from data centers globally.
Many enterprise and government customers use
AWS Cloud to transform their organizations and
businesses. AWS offers the most comprehensive
and broadly adopted platform of services and
features, which allow their customers to be more
agile while reducing computing costs. Geospatial
customers benefit from the ease, speed, and costeffectiveness of their services, which frees them
from having to purchase, maintain, and operate
their own servers and data centers. www.usgif.org

# VIVAX METROTECH INTEGRATES POINTMAN INTO FIRST UTILITY LOCATE DEVICE WITH RTK GNSS

ProStar Holdings, a provider of Precision Mapping Solutions, has announced the successful integration of its flagship product, PointMan, into the **Vivax Metrotech vLoc3** with integrated RTK (Real-Time Kinematic) technology. The integration with the vLoc3 RTK-Pro creates the first utility locate device with an integrated RTK GNSS receiver running on PointMan. This integration will provide centimetre accuracy of **the precise location of buried utilities in real-time** without an external GPS/GNSS receiver. The Vivax Metrotech vLoc3 RTK-Pro receiver is the first to add RTK (Real-Time Kinematic) GNSS (Global Navigation Satellite System) accuracy to a utility locator. Using the RTK-Pro internal cellular module with 4G LTE capabilities, the operator now can connect to the NTRIP RTK caster that provides RTCM 3 corrections.

www.prostarcorp.com

## EUROPA TECHNOLOGIES LAUNCHES EUROPAIQ PROPERTY INTELLIGENCE

Europa Technologies has launched europalQ, a suite of property intelligence data for Great Britain which can provide new and deeper insights into property assets and their neighbourhoods, thereby underpinning critical decision-making. europalQ covers both commercial and residential property and is organised into several categories, including physical, financial, environmental, commercial, telecommunications, utilities, public transport, road networks, locality, government, healthcare and demographics. All property intelligence data in europalQ is indexed by Unique Property Reference

Number (UPRN), which is a unique identifier assigned to all addressable locations in Great Britain. europalQ uses UPRNs to connect property intelligence to comprehensive address databases, including AddressHub and OS AddressBase.

www.europa.uk.com

www.geoconnexion.com 7

## PARROT LAUNCHES ITS BUG BOUNTY IN PARTNERSHIP WITH YESWEHACK

Parrot, the European drone group, launched its Bug Bounty program with YesWeHack, the first European crowdsourced security platform. Through this partnership, Parrot benefits from YesWeHack's vast community of cybersecurity researchers to **identify potential vulnerabilities** in its drones, mobile applications and WebServices. The Bug Bounty program will take place in two phases: the private programs will initially give exclusive access to selected security researchers and will include **future Parrot drone models**. The expertise and diverse skills of the researchers will confirm the high level of security of the products before they are marketed, for the greater benefit of Parrot users' security and the protection of their data. After a first phase in a private Bug Bounty program, and after being commercialized, the products will enter a public program. **www.parrot.com** 



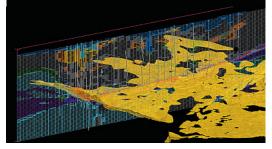
# THINKWHERE MAPPING PORTAL HELPS SCOTLAND ACHIEVE 100 PERCENT SUPERFAST BROADBAND COVERAGE

The Scottish Government is using the latest mapping technology to engage with suppliers and boost broadband coverage in rural communities. Using a **cloud-based Geographic Information System (GIS)** developed and hosted by thinkWhere, suppliers can identify properties that are currently not connected to superfast broadband and are eligible for vouchers to contribute to the capital cost of connection on behalf of community groups or individual premises. Scotland has some of the most challenging **topography for telecoms infrastructure**, which is why the Government's commitment to deliver superfast broadband to every address has resulted in one of the most ambitious infrastructure projects in Europe. Supporting two **multi-million pound investment programmes**, the Scottish Broadband Voucher Scheme (SBVS) specifically targets properties that will not be connected as part of the main programme of works or those that will not be connected under the original project timeframes. **www.thinkwhere.com** 



## NEW TECH FROM MAPTEK TO UNCORK GEOLOGY BOTTLENECK

Machine learning combined with cloud computing is destined to free up the geological supply chain to allow businesses to better leverage a key asset - their geological model. April 2021 sees the market release of **DomainMCF**, a platform that Maptek says will 'put the geology back into geologists'. Geologist and project lead, Steve Sullivan said that geologists feed in drilling data and obtain domain or grade models in dramatically less time than traditional resource modelling methods. DomainMCF applies deep learning and big data computing methods to generate domain boundaries directly from drillhole sample data. Rapid generation of resource models is a game changer for operations. It avoids bottlenecks that may be created when waiting for up to date models and avoids the risks of using non-current information for planning current work. www.maptek.com



### **KOREC LAUNCHES KOREC MAPPING**

KOREC announced the launch of KOREC Mapping in a move to consolidate and expand the KOREC offering of field to office data collection and handling solutions available across the **UK** and **Ireland**. This development will see new partnerships announced as well as an expanded team of KOREC development, technical and consultancy professionals. This team will be on hand to deliver and support a full range of **senseFly** and **Parrot** drones, mobile mapping systems and services, Trimble hardware and software and KOREC's own in-house **KOREC Capture** range of field-based solutions. KOREC is unique in offering all these services as a one stop shop. Bringing together over 50 years of combined mapping experience, backed up by specialist industry sector knowledge, this larger team will operate countrywide via a local network and will have strong links to both new partners (to be announced) and existing partners such as The Drone Pilot Academy, Ordnance Survey and Trimble. **www.korecgroup.com** 



## TRIMBLE AND AMBERG TECHNOLOGIES COLLABORATE ON A SOLUTION FOR TUNNELING

Surveyors and Construction Professionals in North and South America Trimble and Amberg Technologies announced a collaboration to provide a **tunnel survey solution**. The combined hardware and software solution will enable construction, mining professionals and surveying service providers in underground environments to utilize a complete **field-to-office workflow** for increased efficiency and productivity. The Trimble and Amberg solution enables tunnel surveyors to perform a variety of underground tasks such as excavation guidance, control, automated survey and stakeout of different tunnel elements using design information. In addition, it delivers a comprehensive module for digitalization of tunnel construction and further optimization of related processes. **www.trimble.com** 



## UAVOS AND STRATODYNAMICS TEST HIDRON STRATOSPHERIC GLIDER

The HiDRON stratospheric glider, a joint project between UAVOS and STRATODYNAMICS, has successfully carried out its regular test flight. UAVOS' operators launched the **stratospheric aircraft** from a high-altitude balloon carrying a technology supported by NASA's Flight Opportunities program successfully deploying an experimental payload to **24 km** altitude and back. Extensive testing was performed to test operation in high altitude flight regimes utilizing UAVOS' autopilot system and payload test services. A launch routine was tested allowing a safe transition from free-fall to stable horizontal flight in thin air after being dropped from the balloon. UAVOS' autopilot system has once again proven its superior long range performance Beyond Visual Line of Sight (BVLOS) capabilities.

www.uavos.com





# OPTIMIZE WORKFLOWS BETWEEN ASSESSMENT & MAINTENANCE



Optice is a real-time visualization and exploitation tool that enriches data and shortens the time from data acquisition to action

TextronSystems.com



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www.geoconnexion.com

#### GEOSLAM LAUNCHES NEXT GENERATION DATA PROCESSING

GeoSLAM is bringing automation to the industry, with the launch of **GeoSLAM**Connect. Connect is an automated processing platform that provides users with the flexibility to process their data to their exact specifications all through a series of interactive customisable script-based workflows. Developed on GeoSLAM's new operating system, **LiDAR OS**, and compatible with the ZEB family of products, the platform will minimise the time and effort needed to manually process datasets and give users the option of add-on modules for automated analysis of a point cloud. The easy-to-use interface enables users to run workflows on their **ZEB data** and applies further processing steps including filtering, decimation and integration of additional datasets such as photos and notes using a new phone app. www.geoslam.com

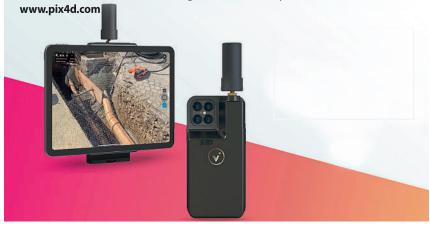


## G2SURVEY LIMITED: THE LATEST LEICA GEOSYSTEMS AUTHORISED DISTRIBUTOR AND SERVICE PARTNER

G2Survey Limited, a new independent Survey Equipment Specialists, is now officially up and running. As the latest **Leica Geosystems authorised distributor** and service partner, the company offers the latest innovative technology, including the most advanced GNSS, 3D laser scanner and total station solutions. Supplying surveying professionals, contractors, civil engineers, utility providers, construction and geospatial industries, delivering high service levels that match with the calibre of carried brands. In addition to the sale and hire of leading surveying instruments, G2Survey Limited offers a national support, repair, and calibration service, along with technical support and training. **www.g2survey.com** 

## PIX4D LAUNCHES SURVEY-GRADE 3D MODELING ON MOBILE DEVICES WITH RTK ACCURACY

Pix4D announces the commercialization and worldwide exclusive distribution of the **viDoc RTK rover**, enabling ground-based **RTK-grade 3D scanning** with iOS mobile phones and tablets through the **Pix4Dcatch app.** Conceived by viGram GmbH., a German company led by professional surveyors, the viDoc RTK rover is designed with an eye for accuracy and works with Pix4Dcatch for image acquisition. The hand-held RTK rover is a replacement for more expensive ground surveying equipment that does not compromise on accuracy to achieve 3D, actionable results. The viDoc RTK rover, synchronized with Pix4Dcatch, geotags the images of a 3D scan **in real-time**, while connected to any **NTRIP service**. Extensive research has revealed that it is possible to achieve 3D models with an absolute geolocation accuracy of less than 5 cm.



# DEVON AND SOMERSET FIRE AND RESCUE SERVICE PURCHASE GIS MODELLING SOFTWARE AND SERVICES FROM CADCORP

Devon and Somerset Fire and Rescue Service
(DSFRS) has replaced their in-house risk modelling
system with the Geographic Information System
(GIS) Cadcorp SIS. When the fire service went to
market, they had a requirement for an integrated
product that could seamlessly model area risk and
workload allocation. DSFRS selected Cadcorp
SIS Desktop with the resource planning and
performance monitoring application Cadcorp
Workload Modeller, and Cadcorp Risk
Modeller for testing the impact of various risk
factors. The fire service is currently developing
its new Community Risk Management Plan
(CRMP). It will be relying on Workload Modeller
to explore the likely effects of making changes
to resourcing strategies, and Risk Modeller for
locating, assessing, and analysing risk coverage.
www.cadcorp.com

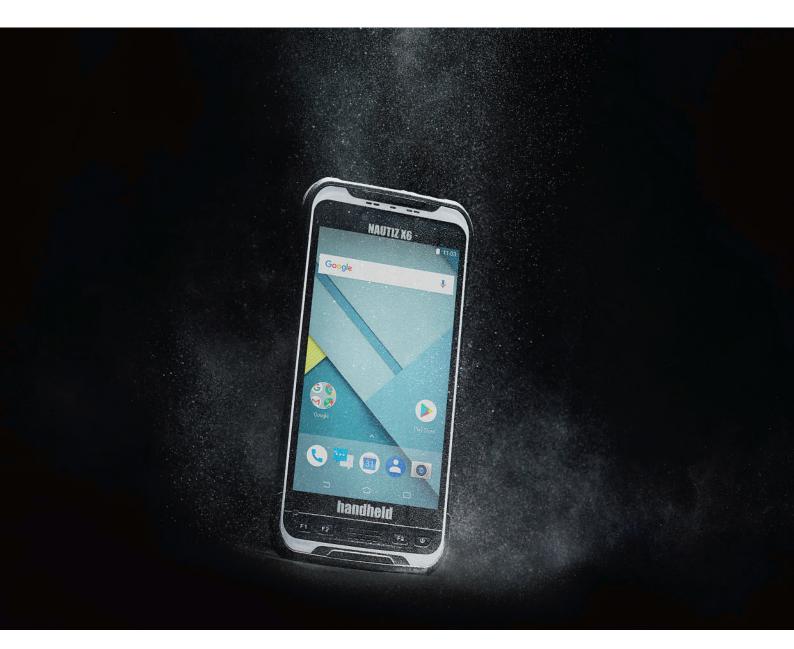
### EXTENSIS OFFERS GEOVIEWER PRO ALL-IN-ONE GEOSPATIAL DATA VIEWER AT NO CHARGE

Extensis, a provider of digital asset management solutions, announced its GeoViewer Pro for Desktop application will now be offered at no charge. GeoViewer Pro is a standalone **GIS image viewer** for compressed MrSID files, raster imagery, LiDAR point clouds, and vector layers. GeoViewer Pro was developed by LizardTech, now Extensis, as a paid multi-feature upgrade to the free GeoViewer application. It allows end users to view **satellite**, **aerial** and **drone image files**, as well as **LiDAR data** and **GIS vectors**. Moreover, it is a free way to view MrSID, JPEG 2000, NITF, LAS, and LAZ files created with the popular GeoExpress software. In addition to supporting a variety of raster image formats, GIS shapefiles, and even KML files, the core functionality of GeoViewer includes customizable display settings, support for OGC map services, exporting files, and displaying maps in their native projections. **www.extensis.com** 

## GOOGLE EXTENDS CONTRACT WITH 1SPATIAL

1Spatial, a global provider of Location Master Data Management (LMDM) software and solutions, announced that following an initial trial and implementation phase, Google Real Estate and Workplace Services, a division of Google has extended its contract for services to support the licencing of 1Spatial's rules engine, 1Integrate, and cloud portal, 1Data Gateway. The extension to the contract is worth US\$500k in services to be delivered in the current financial year. This amount is in addition to the annual term licenses for the current deployments of US\$185k per annum. The Google Real Estate and Workplace Services division manages the extensive Google property estate, consisting of almost 900 buildings. www.1spatial.com

# NAUTIZ X6 THE ULTRA-RUGGED ANDROID PHABLET



### **SMALL PROFILE, BIG IMPACT**

Take the high-visibility functionality of a tablet and the go-anywhere performance of a truly rugged handheld and combine them, - and you'll end up with one device that could take you through your workday with ease: it's the Nautiz X6 ultra-rugged Android phablet.

Learn more at www.handheldgroup.com/nautiz-x6 or scan the QR code



## SSC ANNOUNCES FOUR NEW POLAR ANTENNAS TO STRENGTHEN ITS UNMATCHED POLAR CONNECTIVITY

Swedish Space Corporation (SSC) strengthens its polar capability with four new antennas at its polar ground stations; two in Canada and two in Sweden. First out is a new **7,3m tri-band antenna** at the Inuvik Satellite Station Facility (ISSF) in Canada. Together these four antennas will extend the SSC's capacity and capability by adding further connectivity for **polar orbiting satellites**. The announcement marks yet another step in SSC's major extension towards a fully global Ka-band connectivity by the end of 2021. The new 7,3-meter antenna, owned and operated by SSC, features tri-band capability accommodating **S-, X- and Ka-band frequencies.** Together with the two existing SSC antennas at the ISSF site, the new establishment will add to the company's unmatched polar connectivity for satellite operations. **www.sscspace.com** 



### XENOMATIX LAUNCHED THE NEXT GENERATION TRUE-SOLID-STATE LIDAR

XenomatiX, a pioneer of true-solid-state LiDARs for ADAS, autonomous vehicles, and other road applications, including construction and maintenance, is launching the next generation of **XenoLidar-X**. As the latest true-solid-state solution from XenomatiX, the new XenoLidar-X is designed to meet the performance requirements needed by today's OEMs. XenoLidar-X, a standalone, **off-the-shelf** solution with no moving parts, is

modular in design and fit for centralized



or distributed integration via two distinct versions: **Xpert** for long-range applications and **Xact** for mid-range applications. XenoLidar-X provides a simultaneous optical output power increase and an electrical power consumption decrease by a factor of 10, using a unique concept of performant global shutter XenomatiX calls "multi-beam." **www.xenomatix.com** 

### EKINOPS AND IEC TELECOM GROUP DELIVER COMPACT PORTABLE SATELLITE COMMUNICATION SOLUTION

Ekinops, a supplier of optical transport equipment and router solutions for network operators, and IEC Telecom Group, a global provider of managed network communication solutions, launch OneGate Compact, a lightweight and portable plug-and-play solution that provides critical communications functions for both terrestrial and maritime applications. OneGate Compact, purpose built for performance in tight spaces, seamlessly reroutes available bandwidth to essential processes to ensure vital communications remain online, whatever the circumstances. The hybrid satellite and GSM solution also supports the continuity of governmental and business operations in rural areas, enabling applications such as connected cars for first responders, telemedical support for doctors in remote areas, and mobile offices for public services such as e-banking and e-learning. www.ekinops.com

# OGC AND CRN PARTNER TO ESTABLISH A UNIQUE GEOSPATIAL REAL PROPERTY IDENTIFIER

The Open Geospatial Consortium (OGC) announced that it has signed a Memorandum of Understanding (MoU) with the non-profit Collateral Risk Network (CRN). Under the MoU, OGC and CRN will work together to develop a **unique geospatial real property identifier** (PUID) that has applications in housing finance and beyond. CRN was formed in 2003 to move the collateral valuation profession forward and establish standards to ensure that **appraisal reports** are credible, reliable, and useful in collateral risk analysis. Standards are core to modernizing and advancing a real estate IT "Super Highway," yet a unique property identifier is conspicuously absent. The PUID aims to provide the basis for such a catalog while ensuring that future connections to data from city, building, underground models, and/or other associated data, for example, are easily enabled. **www.ogc.org** 





## BLUESKY METROVISTA MESH MODELS UNDERPIN DYNAMIC MAP OF LONDON

Photorealistic 3D models from Bluesky are being used to produce a new interactive map of London. Created by the Centre for Advanced Spatial Analysis (CASA), part of the Bartlett Faculty of the Built Environment at University College London (UCL), the **3D virtual map** brings together **live real-time data streams** including sensor readings, TFL transport updates, and social media information such as geolocated tweets from Twitter. These are then visualised over the **Bluesky MetroVista mesh models** to provide a live view of the city. The MetroVista product range uses new aerial mapping technology to simultaneously capture vertical and oblique photography together with laser scanned height measurements. These provide real world context for CASA's mapping platform which is intended to support uses in environmental monitoring, transport, architecture and urban planning. **www.bluesky-world.com** 

## PLOWMAN CRAVEN PASSES REINS TO ITS EMPLOYEES

UK surveyor Plowman Craven has announced it has become an Employee Owned Trust (EOT) on 23 March 2021 following the sale of investors' shares to its employees. Plowman Craven has since joined the likes of Arup, Mott MacDonald, Black & Veatch and Triton Construction by moving to an **employee ownership business model.** The move will enable the technical consultancy's staff to become more invested financially and emotionally in the business' future trajectory, as well as benefit from the generous tax allowances that exist for profit sharing under the EOT regulations. Plowman Craven will create further employee consultancy groups within the business in the coming months to provide additional avenues for employees to be more engaged with the decision-making processes of the company. **www.plowmancraven.co.uk** 



## CLOUD LOCATION SERVICE BRINGS POWER AUTONOMY TO CONSTRAINED IOT DEVICES

u-blox, a global provider of positioning and wireless communication technologies and services, has introduced a service that offloads the position calculation from IoT devices into the cloud. The CloudLocate service will enable accurate positioning of even the simplest IoT devices with the most constrained computing, communications, and energy resources. The service will be used to locate devices that track large assets such as containers, cargo, rental e-bikes and scooters, and small high value assets such as smart sensors and power tools. Typical applications include logistics, inventory, supply chain, production logistics, and cold-chain management. CloudLocate is ideally suited for Industrial IoT tracking applications that must survive in the field for months or years without battery replacement and only need a few position updates per day. www.u-blox.com



# VIRTUAL SURVEYOR INTRODUCES DROPBOX INTEGRATION FOR EASY COLLABORATION AND FILE ACCESS FROM ANYWHERE

Virtual Surveyor has introduced Dropbox integration in Version 8.0 of its popular drone surveying software. This means Virtual Surveyor users can now access their project files from anywhere while enjoying easy and affordable collaboration with team members and file sharing with external clients – even in low-bandwidth situations. Virtual Surveyor is a powerful surveying software that bridges the gap between **drone photogrammetric processing applications** and **engineering design packages**, enabling surveyors to derive topographic information from drone data needed by engineers for construction, mining, and excavation projects. The software presents an interactive onscreen environment with drone orthophotos, digital surface models (DSMs), and/or LiDAR point clouds where users generate CAD models, create cut-and-fill maps, and calculate volume reports.

### www.virtual-surveyor.com

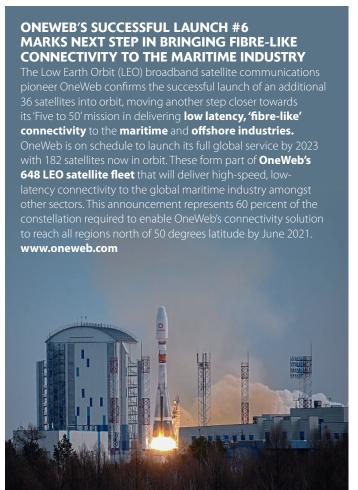


# PSDS - FAST AND ACCURATE POSITION DETECTION

Position sensitive detectors (PSDs) offer high accuracy (~2.55µm), excellent resolution and short rise times as fast as 30ns for non-contact alignment, position measurement/detection and machine vision applications. SiTek's PSDs are available in wavelengths from **400-1100nm** with a variety of options including one dimensional (single axis), two dimensional (two axis), specialist 3D arrays for contour measurement, UV, YAG and nuclear sensors. Application examples include railway bow measurement for fault detection, vibration monitoring, 3D contour measurements, bridge and tower construction, shaft alignment, robotic guidance, and a variety of machine vision applications. These PSDs can be used with the **SEEPOS PSD processing tool** to interface with any PSD and connect directly to a computer, complete with a LabVIEW compatible software package and data analysis suite. **www.lasercomponents.com** 



www.geoconnexion.com 13

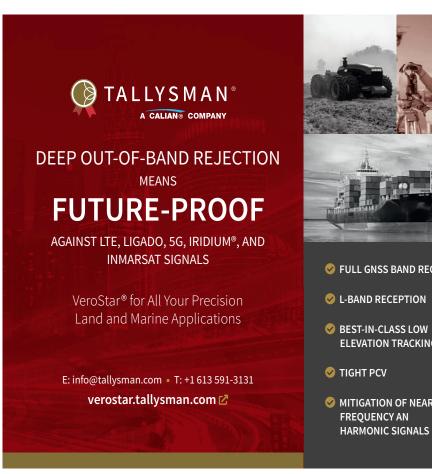




hard breaking (70%) and rapid acceleration (90%). Applied Companion also includes a suite of personal safety features that

provide 24/7 protection to lone workers.

www.applieddriving.co.uk







#### **VEROSTAR® POLE MOUNT**

RTK Rover for Survey, Construction, and Marine Applications



### **VEROSTAR® SURFACE MOUNT**

Machine Control, Precision Agriculture. and Autonomous Systems





### **VEROSTAR® EMBEDDED** STANDARD & MINI

Smart Antennas and High Precision **Embedded Applications**