

Issue 1 2018

raverse

For more information please visit www.korecgroup.com

IKOREC

Ireland Office: 01 456 4702 NI: 0345 603 1214

🖸 in 🛗



- Taking BIM to the field Felix O'Hare case study
- KOREC Opinion we share our thoughts on the TSC7 logger
- New releases from Trimble and senseFly
- KOREC news round-up



Traverse!

Welcome to the first edition of Traverse, the new KOREC gesopatial newsletter dedicated to Ireland.



▲ Alan Browne, CEO

As the Irish economy continues to grow at exceptional levels it creates lots of challenges for our clients across all the sectors we deal in

As some people would say, these are "first world" problems but they are problems nonetheless

With unemployment now just above 5%, attracting and retaining skilled workers is a continual headache for

employers. At KOREC we are constantly looking at ways to make workers in the field more productive, whether it be a surveyor on a job with the Trimble SX10 shortening the time in the field and facilitating enhanced deliverables, to our K-Matic solutions which can replace paper and pen in the field,

Welcome to Fighting instrument theft with L2P tracking

A stolen Murphy Surveys instrument was recovered, calibrated and back on site within four days thanks to Trimble L2P tracking technology and a fast response by the local Gardai.

Survey instrument theft is a problem that's showing no signs of abating and unfortunately at the end of summer, Murphy Surveys Ltd was the latest KOREC customer to fall victim. Although this theft occurred just outside of Dublin, Murphy Surveys report that they have suffered more theft incidents in the UK than Ireland. However, on Friday 29th June 2018, a Trimble S5 Robotic Total Station was stolen from a site at midday. The theft was immediately reported to the Gardaí, along with the make of vehicle driven by the thieves.

Around 5.00pm, Murphy Surveys Ltd. contacted KOREC Ireland on the off chance that the instrument was Trimble L2P protected and were delighted to hear that it was and that we could trace its whereabouts. A quick log-in to our system and we could see that it was currently at rest in a residential area to the south-west of the city, about 30km from the site.

The Gardaí were quick to follow up on a series of screen grabs we sent them pinpointing the S5's location. Although they searched several vehicles in the area, they were unable to recover the instrument. This was due to the number of cars and buildings in close proximity and because there was no sign of the vehicle that Murphy Surveys Ltd. had described

Not to be put off, KOREC was able to track the journey of the S5 in detail, thus revealing that the instrument had clearly been moved from one vehicle to another. However, until it was active again, it was impossible to pinpoint exactly which vehicle.

Position Reporting	
Last Known Position	: 53.282685° N 6.403403° W
Last Updated On	: 29/06/2018 17:55:32

reducing human error and speeding up aggregation of data.

All our solutions aim to reduce the effort and skills required for data collection and processing so those skills can be deployed in modelling and analytics which create significant added value.

One of the descriptions of what we do at **KOREC** is that we are the "Interface between the digital and the physical world". Nowhere is that more evident than in Construction. Trimble Fieldlink is software that allows the engineer to literally bring the

...continued overleaf

Waiting game

We therefore set up a 'geo-fence' on the Trimble L2P tracking software and waited...

Around midnight the geo-fence alarm was triggered and a few minutes later the instrument was shown to be stationary in a green area. The Gardaí were called and the instrument was immediately recovered. It was returned to KOREC the following Monday morning for cleaning and recalibration, and was back on Murphy Surveys Ltd. site, fully functional, by the middle of the week.

Call us for full details on Trimble L2P.



▲ L2P pinpoints the stolen Trimble S5 instrument

Stop Press

Fantastic winter deals on Trimble R10 kits, R8 + VRS Now and the Trimble S5 Robotic Total Station. Call for details.

Measured Solutions

Construction | Surveying | Mapping



...continued, 'Welcome to Traverse'

digital model into the field and vice versa. With the housing crisis and log jams in construction, it is going to be essential that we embrace off site construction and new building practices. Solutions like Fieldlink will facilitate this and it is therefore the subject of our first issue case study with Felix O'Hare.

Irish distributor agreement with GeoSLAM

We are delighted to announce that under the terms of a new agreement with 3D mobile mapping technology specialists GeoSLAM, we have become an official distributor of the company's ZEB-REVO handheld laser scanning solutions in Ireland. KOREC already successfully distributes this product throughout the United Kingdom and Northern Ireland.

GeoSLAM specialises in the manufacture and development of "go anywhere" 3D mobile mapping technology, a range which includes its ZEB-REVO handheld, lightweight scanner, ZEB-CAM camera, and the recently launched ZEB-REVO RT (real time) scanner.

With no requirement for GPS, GeoSLAM technology allows users to rapidly build highly accurate 3D models within minutes, whilst on the move. It is adaptable to any environment including complex and enclosed spaces, and especially GPS-deprived spaces – such as indoors or underground. With an accuracy level of ±15mm ZEB-REVO applications include measured building surveys, construction, stockpiles, crime scenes and many more.



▲ The handheld ZEB-REVO

.....

New Products

Trimble R10 Model 2

Seriously, we thought it couldn't get any better, but Trimble has just announced a Model 2 version of its market dominating R10.

Model 2 enhancements include:

- 672 GNSS channels for unrivalled futureproof GNSS constellation tracking, including GPS, GLONASS, BeiDou, Galileo, QZSS, IRNSS as well as the full range of SBAS
- Improved reliability against sources of interference and spoofed signals
- Increased battery life for around 33% more operating time in the field
- GGB internal memory for storing more than 10 years of raw observations
- Even better equipped for Bring Your Own Device environments with Android and iOS support



senseFly eBee X

Quality, efficiency and safety are the drivers behind senseFly's latest customer focused release

Superseding all previous eBee models, the X brings several useful new features along with a significantly reduced cost for the RTK option. The eBee X has been launched with the promise that "it's not about the drone," but instead about overcoming business challenges... and indeed it offers a camera to suit every job! Here's what we like:

- Expanded choice of cameras The eBee X includes a range of revolutionary new camera options to suit every mapping job allowing you to customise your eBee according to your application
- Suitable for challenging sites Built-in space-friendly Steep Landing technology (35° approach)
- Even more rugged Optimised airframe design and ultra-strong underbody
- Significantly lower cost for RTK option Worth repeating!
- Endurance Extension option Unlocks a flight time of up to 90 minutes (versus a maximum endurance of 59 minutes by default). Whilst not strictly relevant in the UK, this could be useful abroad when flying with less restrictions

Call KOREC now to book your demos of the Trimble R10 Model 2 or eBee X.

KOREC Opinion: The Trimble TSC7



It's been six months since the launch of Trimble's ground breaking TSC7 logger which means **KOREC** Ireland's Kevin Kinahan (Geospatial Technical Support)

- Hot swappable battery: Charge one and use the other rather than relying on one battery like previously
- Radio Module: Swap out from controller to controller so there's no extra cost for buying multiple radios



- New command keys and favourites: Customise the way you survey for speed in the field
- Sync all the data back to the office: No need for a laptop, the TSC7 covers your needs with an Apollo Lake processor which means just one controller for multiple jobs
- Selfies: Dual camera, front 2MP and rear 8MB, for meetings in the field, recording videos and capturing that perfect image for the KOREC photography competition!
- Remote Access to TSC7: Troubleshooting and technical support where and when you need it
- And saving the best for last: Getting me for support team and training..... Bargain!

Although we were constantly hearing about tablet updates, it's been a while since we've seen anything new on loggers. Therefore, the launch of the TSC7 has come at just the right moment showing that the data collector market is still very much alive and kicking.

This is great news for KOREC Ireland customers because many of you have told us that you favour a logger over a tablet, enjoying its ruggedness and easy handling.

▲ @KevinK-KOREC ► has had plenty of time to put it through its paces. We asked him for his top 10 features – he gave us 13!

- 7" screen display: Because size matters! But not just that, it's the contrast and clarity of the screen. Any way you turn, in sunlight or drizzle, the image quality is never compromised
- Nice touch: The screen responds like your smartphone but stays traditional to Trimble's history of the buttons, but they're even faster to use and even more accessible. And of course Trimble has kept the backlight (old skool)
- Rugged: The surveyor's number 1 fear?...dropping the controller. Not to worry, the TSC7 is built to last, you can drop it all day long with no downtime (IP68)
- Integrated stylus: Not everyone loves a touchscreen so there's an integrated stylus pen for precision control, signing documents in field etc.
- Memory: Surveyors' had limited drawing size on the old controller...not any more, thanks to the faster processor and 8GB RAM, 64 GB memory size bringing increased speed and mobility in the field
- New UI & UX: Trimble Access 2018 is clean and easy to use with no training required for those coming from Access 2017 and of course Trimble have held on to the values of the Access of old

However, there's no doubt that a freshen up was required to reflect the Trimble hardware and software developments we've seen, especially with the arrival of the SX10, an instrument with no eyepiece that relies on good visual information.

For a demonstration, call us on 01 456 4702 or 0151 931 6701 (NI)



^{▲ &#}x27;Origin of the species' Trimble style!

Customer story

Taking BIM to the field with Trimble FieldLink



survey technology has enabled Newry based contractor Felix O'Hare to position itself as one of the most enterprising companies in Northern Ireland for BIM and digital construction.

Armagh has been an educational centre since the time of Saint Patrick so it is fitting that building work on the town's new Southern Regional College (SRC) £35 million campus represents one of the largest construction contracts granted in Northern Ireland this year. On track to open within two years, the project is part of a £95 million investment by SRC and the Department for the Economy to create three new state-of-the-art educational campuses across the Armagh City, Banbridge and Craigavon area.

Undertaking the work for SRC's Armagh campus is Newry based contractor Felix O'Hare and Company, one of Ireland's most progressive construction companies, successfully combining a proud heritage of traditional craft skills and values with a strong commitment to new technology in construction and surveying.

Responsible for the planning and implementation of the setting out and survey work on the SRC project, and also a driving force behind the advancement of survey technology within the company, is Senior Site Engineer, Wayne Nolan

This advancement began back in 2014 when faced with a demanding project combined with a company ethos of maintaining the highest possible standards of workmanship and data quality, all exacerbated by external conditions such as stricter budgets, cost control and time constraints, Wayne approached the company Contracts Director with a view to introducing new survey technologies and software that would immediately address existing challenges and also prepare the way for the company as a leading BIM enabled contractor.

Adoption based on performance

Wayne set up a meeting with Irish Trimble distributor KOREC and an initial investment was made in a Trimble S-Series Robotic Total Station with Access on-board software along with the accompanying office software, Trimble Business Center. This development immediately increased site productivity four-fold due to the 'one-man'

A well-established policy of embracing construction technology. The drivers on this project include the client's requirement for BIM technology and Felix O'Hare's own commitment to better project delivery using digital construction techniques. The goal is to use BIM processes and methods during technical design and construction delivery to improve quality, efficiency and safety while reducing construction time, costs and defects.

> An early step in this process was ensuring that the right survey technology was in place for the company to deliver on BIM-based construction projects. This investment also indicated to clients and designers a clear commitment to both the technology and being ahead of the game when it came to validation procedures on site and the assurance of high accuracy data collection

> Rori Millar, Felix O'Hare's Head of Digital Construction, agrees. "We see time and time again a breakdown in information sharing between the design team and the construction team. The design team spends a lot of time and effort producing these high quality BIM models and the construction team tends to only work with 2D drawings sections and elevations. We felt that this created a lot of wastage and that the construction team should have the capability of using the models. We had to find solutions for getting the most out of these models to produce a quality build in a cost effective, timely manner. The BIM process and the adoption of a common data environment allows for one single source of true information, i.e. current revision of drawings, models, etc Trimble's products, along with BIM champions like Wayne have allowed for a smooth adoption of these building methods and the benefits are there for everyone to see!

> The project team's dedicated approach to 3D technology supports all aspects of the SRC project - from the coordination to the logistics and planning, all aided with animations and virtual walk-throughs to provide support for decision making, the procurement of materials and production of laser accurate field layout with the Trimble FieldLink system.



- Exceptional visual verification and validation of work
- A system with the ability to reduce errors, improve accuracy and maximise output at its core

KOREC therefore arranged a demo for Wayne of Trimble's RTS773 3" total station and FieldLink software running on a Kenai ruggedised tablet. This system was found to meet all of Wayne's key requirements.

Trimble FieldLink enables contractors to import 3D models from a range of sources (eg REVIT, SketchUp and Tekla) and accurately lay out all the points to be marked. Wayne can use the RTS to pin-point locations from the 3D model, with 2mm tolerances, using the Kenai Tablet to select each point in turn and mark where the laser indicates. The end result is that Wayne has the ability to set out five times as many points as a two-person team would using manual methods. Incorporating these methods, along with Felix O'Hare's BIM strategy for this project, has allowed for greater accuracy of install creating fewer snags thus saving time and cost to the overall project.

Assessing progress

Six months into the project and as the primary user, Wayne

"To us, KOREC's after sales technical support is as important as the instruments themselves." Wayne Nolan,

Felix O'Hare

has had sufficient use of the Trimble RTS773 and FieldLink system to have a clear idea of where its strengths lie. "For us the standout feature is the direct stake-out from the 3D BIM model data. The time saved with this operation not only reduces office time but also ensures site machinery is maximised to its full potential reducing any downtime! Tasks are completed quicker and more efficiently whilst maintaining our high standard of accuracies across a whole range of site operations.

"As with our BIM models in the office, we can now view point attributes in the field and

determine various components, sizes etc... reducing time spent in the office. For our designers, we can collect deviations in the field and export for use in the BIM detailing back in the office. Consequently, we have developed a more detailed and formal approach with our QA submissions as we have the 'live' survey data taken in the field which is backed up using the Trimble RTS's camera within our reporting schedules." (The camera is part of the instrument's VISION functionality)."

Wayne concludes, "As we all know, it isn't always possible to pick up and identify every problem within the models, so issues do occur on site with the best will in the world to try and prevent them. This is where Trimble Field-Link and the RTS773 play an important role for us. We can quickly identify areas of concern on site and bring the data into the model for further analysis and discussions in the office with the relevant parties to determine a suitable solution to try and overcome the problem without further delay. In short this is an awesome piece of kit in the BIM environment!'

Looking forward

The project will be entering the MEP installation process in the coming weeks. With ceiling voids being restricted and congested with the mass amount of services, ventilation ductwork and containment etc. required, the co-ordination of the MEP will be vital to the success and completion of the project. Wayne will be using the RTS773/FieldLink system to assist with the layout and validation of the MEP services, working from the federated BIM models and producing site reports to help overcome any issues that may arise. Using this, along with Dalux and its Augmented Reality feature, the Felix O'Hare team is able to installation of services against the models that were designed in the office.

operation and improved the company's workflows as well as allowing for a more formal method for Wayne to deliver final outputs to the client such as reduced dig and stockpile volumes along with detailed 'as-built' drawings.

As Wayne moved on to the next project, the success of the Trimble robotic technology led to the purchase of Trimble's R10 GNSS technology for integrated surveying where the field controller and Access software provide a common file and user interface. Again, increased productivity and a quick mobilisation period for the project justified the investment - a site set up that would normally have taken a few weeks was achieved by Wayne and his team in just a few days.

BIM and the introduction of Trimble **FieldLink**

Within Felix O'Hare, the feeling is that investment in technology is vital, not just to the success of its construction projects, but also during the rigorous tendering processes to maintain a healthy and steady workload. Consequently, Felix O'Hare is one of the up and coming companies in Northern Ireland that has already embraced BIM and digital

▲ Trimble FieldLink running on the Kenai tablet

Key requirements

Wayne had a clear idea of what he required from a BIM compatible digital setting-out system:

- Ability to handle and process the large files associated with the various federated BIM models
- Easy visualisation and accurate setting-out of hundreds of field points from federated BIM models at the click of a button without having to prepare various other drawings as with CAD files
- A link between office and field as seamless as possible (in this case collaborative cloud-based platform Dalux is used)
- Ability to have the most up to date 'live' models in the field and office

All information and pictures kindly supplied by Wayne Nolan. Senior Site Engineer, Felix O'Hare and Company.



▲ Image taken from Dalux showing the services set out in augmented reality

Traverse | Issue 1 2018

KOREC Ireland News

KOREC Photo Competition

Did you know that we now have great monthly prizes of KOREC jackets for our photography competition as well as an overall prize at the end of the year? Send your pics of KOREC supplied technology to marketing@korecgroup.com

Past winners include this amazing shot of a monitoring project on Skellig Michael supplied by the Discovery Programme's Senior Geo-surveyor, Rob Shaw.



Traverse: Sign up and win a KOREC hoody!

We're launching Traverse with a great KOREC giveaway!

The first five people to sign up to receive future issues of Traverse will receive one of our stylish KOREC hoodies, perfect for the cooler weather.

Just email your name, postal address and preferred size (S,M,L or XL) to info@korecgroup.com

TII chooses KOREC for drone contract

We are delighted to announce that KOREC has just supplied Transport Infrastructure Ireland (TII) with two senseFly drones, backed up with a 5 year software, training and maintenance contract.

TII will be making use of senseFly's eBee Plus RTK fixed wing drone and the Albris rotary drone for mapping and inspection work on a network of 1,220km of motorway and dual carriageway across the country.

TII believe that that the senseFly drone technology will cover as much ground area in one flight, in under an hour, as a traditional ground-based survey team would cover in 14 days. The drones will also help in eliminating the need for costly and inconvenient traffic management.



Expanding Coastway Surveys chooses KOREC Ireland



"For me service and support were 80% of the Coastway decision to go with KOREC as our preferred supplier and the service we have received has been exceptional." Paul Moir (above left, with KOREC's Shane Murtagh, right).

Coastway Surveys is a thriving survey business with offices in Ireland and the UK. Offering a wide range of services including land, engineering and aerial surveys, scan to BIM and mobile mapping, it is a company that has prepared for further expansion with a new management structure designed to meet the needs of a growing business. As a part of this restructure, Paul Moir has taken up the new role of Operations Director bringing with him extensive surveying, engineering, data analysis and consultancy skills from over 20 years of worldwide industry experience.

One of Paul's first strategic decisions was to select a preferred surveying instrument supplier that was equipped to grow with Coastway Surveys and work with it as a partner during its expansion into new business areas. Although Coastway had had satisfactory relationships with a number of suppliers previously, Paul felt that whilst price, reliability and functionality of equipment would be key criteria, the overriding consideration would be the level of service and support that a supplier could offer. Familiar with Trimble technology, he therefore contacted KOREC Ireland and was impressed immediately by the fast response of the team, by KOREC's personal approach and by the set-up of the company's Technical Support department.

Paul explains, "Service and support are key to the day to day running of our surveying and engineering services. Even the best instruments and software can have break downs or blips and KOREC has proved itself to be extremely proficient in dealing with these issues. The team is always contactable with dedicated support staff so that I never feel I am taking someone away from another area of their job. Issues are addressed immediately and both the technical and sales staff are entirely flexible in their approach - this is the sort of relationship that we believe will help Coastway's dynamic approach towards expansion into new business areas."

The Coastway Surveys portfolio includes Trimble R10 GNSS, S6 Total Station, SX10 Scanning Total Station and TX8 Laser Scanner technology. The company has also purchased senseFly eBee Plus fixed wing survey drones.

Support news

Did you know that **KOREC** Ireland has a YouTube channel?

Sometimes the easiest way to learn is to relax and watch an instructional video so why not visit our KOREC Ireland YouTube channel for plenty of tips and tricks for using Trimble Access, Trimble Field Link, Trimble Feature Definition Manager and Trimble Business Center just for starters. Our channel can be found at bit.ly/2QqycmW

However, if you need some more personalised support for your Trimble, senseFly, K-Matic or GeoSLAM products, the best way to contact our technical support team is via our Dublin office landline on 0035314564702.

When your call is answered we will try to put you through directly to talk with a support technician. If no one is available at that moment, we will ask for details of your support question and email it to everyone in our five strong team. The first one available will contact you. If your support request is more suited to email then please see email addresses of all support technicians below. Again, for the best response, please email them all and the first available will reply:

- aisling.griffin@korecgroup.com
- fran.mullally@korecgroup.comkevin.kinahan@korecgroup.com
- martin.reilly@korecgroup.com
- niall.hand@korecgroup.com

As always **KOREC** Ireland try to provide the best Technical Support on all our products and we welcome any feedback from our customers on how this can be improved...

K-MATIC on LinkedIn



K-MATIC is **KOREC**'s in-house software development company specialising in providing customisable solutions for the

▲ senseFly eBee RTK fixed wing drone

▲ senseFly Albris rotary drone

collection, analysis and processing of geospatial data. It now has a LinkedIn page and this is where we will be posting all related news and updates. Visit www.linkedin.com/company/k-matic/

Contact us:

For further information on any of the products or services mentioned in Traverse, please contact your nearest KOREC Sales Consultant or visit our website

 IRE: 01 456 4702
 NI: 0345 603 1214

 E: info@korecgroup.com
 www.korecgroup.com



Measured Solutions

Construction | Surveying | Mapping



