

The ROVER Reporter

A QUARTERLY PUBLICATION OF eGPS SOLUTIONS

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eGPS Used for Locating Manhole Structures

The eGPS Real Time Network is versatile and can be used in many applications. Most recently the eGPS Network had been used in the inspection and location of wastewater manhole structures in Buford, GA. This was approximately a \$125K project. Keck & Wood, Inc. rented a Trimble 5800, TSC2 with Survey Controller and the eGPS Real Time GNSS Network to help them complete this project ahead of schedule. eGPS had the opportunity to talk with Mr. Carlton after they completed part of the First phase of this project.

Q: What type of project did you complete?

A: Keck & Wood, Inc. (KW) provided survey-grade GPS and mapping services to inspect and locate wastewater manhole structures for the City of Buford, Georgia using eGPS Solution services and K&W field personnel. These services were to be completed in two distinct phases, PHASE I in fiscal year 2008 and PHASE II in fiscal year 2009 under two separate projects utilizing two different field methodologies and technologies.

Q: What future considerations did you need to keep in mind as you planned and completed this project?

A: We kept in mind our access to data, the completeness of the data collected, and the usefulness to future applications

Q: Any other types of equipment?

A: Not in Phase I, Phase II we are using Mapping grade field GPS collectors to capture attribution data.

Q: How hard was it to learn to use the eGPS RTN?

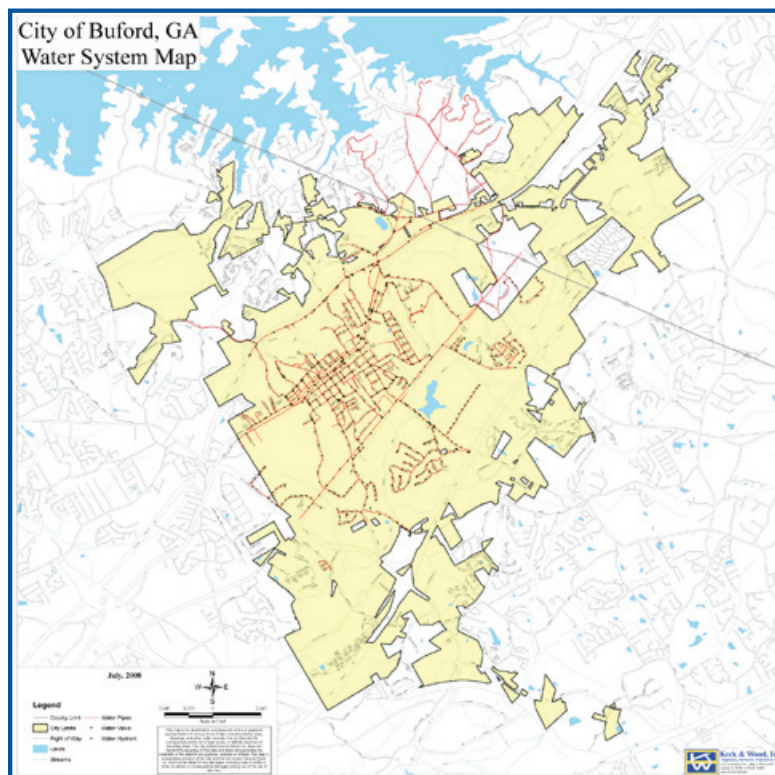
A: Learning the technology was very seamless. The eGPS staff was very helpful in the "talk through, walk through, run through" type of training approach. After the formal classroom training, we appreciated the eGPS trainer going out to the field with us on our actual site to ensure we were using the technology correctly in the field and to be there should we have trouble or questions.

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Mark Your Calendar:

- December 11**
NGS Height Modernization
Teleconference
- December 17**
URISA Workshop
Warner Robbins, GA



Continued inside

eGPS Used for Mapping

Q: How did using the eGPS Solutions Real Time GNSS Network help your production on this project?

A: We were able to provide survey grade results and quality to our data and especially to our client.

Q: How would it compare to using Mapping Grade (DGPS) corrections?

A: The familiarity of our crews to using mapping grade equipment already, allowed us to transition easily to using the eGPS solution equipment.

Q: Was it easy –to-use?

A: Yes

Q: What was the time savings?

A: We were able to quickly capture the positional accuracy and survey grade results quicker with the eGPS equipment. By using this equipment, we could rapidly move to the next tasks and phase earlier than if we had used traditional GPS equipment. This saved us time and money.

Q: Did you require custom training or support that was specifically designed for your project?

A: No, only eGPS training.

Q: How did you feel the eGPS training/support compared with other types of support you have had?

A: Outstanding. The eGPS trainer and rep was available 24 hours a day, if needed, and was very eager to return to our location, phone conference, or provide addition information that we required on numerous occasions. Truly outstanding!

Q: What was the most effective part of this training?

A: The training approach: classroom, hands-on exercises, and then in-the-field personal support at the beginning of the project. This ensured we were off on the right foot with the eGPS equipment. This wasn't just a lecture and let-you-go approach! Additionally, cross training our field team on the value of "survey-grade" accuracies broadened, as well as, deepened their understanding of field data collection.

Q: What was the customized workflow that was designed for your project?

A: The eGPS trainer and rep was keen to assist us in efficiently improving our workflow with the eGPS equipment. This assisted us in developing a field methodology that gave us the maximum return in our rental period. We were able to capture more data in less time, thereby reducing our field crew and rental costs.

Q: How will it help your projects' future needs?

A: This specialized approach will be considered in future projects where the workflows are similar to this project.

Q: Did the customized workflow meet your needs and considerations for this project?

A: Yes.



Q: How did the Survey Grade data integrate with your application software?

A: With the requirement for maintaining a specified tolerance of accuracy, the ability to produce reports and QC the data daily, as well as, import the data into our existing ESRI ArcDesktop suite, the survey grade data integrated well for our business needs and proved to be extremely valuable. By evaluating each days' collections, the field crews could adjust their work and quality of the data they were collecting.

Q: What type of software products did you use for this project?

A: Arcpad, TGO, ArcGIS Desktop 9.3 ArcMAP, ArcCatalog,

Q: What was the accuracy of this data?

A: Less than 1/10 of a foot vertical precision.

"The eGPS rental experience was outstanding. The staff understood our project and provided the training we needed. The equipment was easy to learn and use. We definitely will consider using the eGPS RTN GNSS Network on future projects that call for it." - Randall Carlton, Project Manager

If you want to share projects you have done contact Martha at 770-695-3361 or Mvaughn@egps.net



Product Showcase:

eGPS consistently strives to allow all brands of GPS equipment access to its Real Time GNSS RTK Network. Recently, we have tested three new GNSS network optimized receivers, the Altus APS-3, Magellan ProMark 500, and the Topcon GR3. All three are GNSS enabled, internal modems and are ready to receive all the current and future Satellite signals. If you are considering the purchase of new GPS hardware, these receivers should be at the top of your list. Retail pricing may vary, please contact Lonnie, Lance or Martha to get connected to your local distributor.

Altus APS-3 GNSS receiver, internal GPRS modem, Allegro with Carlson SurvCE Software is available as a turn-key package. eGPS had the opportunity to test it during the month of November, 2008. WOW, what a surprise to find that it performed as good as the “big boys”. Its dual hot-swappable batteries, light weight and overall performance using the Carlson SurvCE software on the Allegro Data Collector platform worked well particularly in hostile environments. Not only do we have the option of using the internal modem for RTN usage, we have the option of 450-470 MHz, or 900 MHz built-in or connecting an external modem for added range. *MSRP Starting at \$17,695.00*



Magellan ProMark 500 GNSS Receiver, GSM/GPRS Internal Modem, with Fast Survey Field Terminal is a great high-performance, all-in-one communications system. This flexible communications system enables NTRIP, direct IP, or point-to-point real-time corrections via a GSM/GPRS-enabled cell phone module (Uses a T-Mobile SIMS Chip) plus a UHF connection using either a Pacific Crest or Magellan UHF radio. The embedded Magellan BLADE technology includes patented GPS+GLONASS processing algorithms insuring the maximum benefit from the added glonass signals. eGPS tested this unit in September 2008. Most impressive was teh network initalization time taking less than 10 seconds. All the currently available signals can be fully utilized, but you can be comfortable knowing the you can upgrade your receiver to meet the evolution of future constelations. *MSRP Starting at \$18,039.00*



Topcon GR3 GNSS receiver, internal CDMA Modem, FC-200 with TopSurv 7 is a proven Real Time Network Rover Package. The addition of the internal CDMA modem has really been a benifit to the RTN users because it allows use of the Verizon Data Network. The latest version of firmware/software perform well and require less support. eGPS has been supporting this unit on the network for several months. We have come to regularly call the TopSurv Software reliable. Since TDS is discontinuing support of the Topcon products, TopSurv is emerging as the reliable solution. G3 Satellite Technology is ready to receive the GPS, GLONASS, and Galileo signals of today and tomorrow. The rover system as a whole is elegant, robust and affordable. *MSRP starting at \$27,900*



eGPS Announces...

...a partnering agreement. eGPS and Navigation Electronics, Inc. formed a strategic alliance in October 2008. This alliance put the eGPS Real Time GNSS network in the hands of the best mapping sales professionals in the southeast. Now not only can you get all the latest Trimble mapping equipment, you can get the precise accuracies of the eGPS Network in one place.

For your demo please contact Jeannine Hightower (770) 789-4537 or jeannine@neigs.com at NEI and Lonnie Sears (678) 878-6610, Lsears@egps.net or Lance Andre (229) 237-1313, LAndre@egps.net at eGPS.



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President's Corner

We are all feeling the economic crunch throughout Florida and Georgia, and across the many industries that utilize RTK. Consequently, eGPS has developed new low-cost subscription plans. In the coming months and years, as we all emerge from this economy, we will have stronger companies, and stronger prospects for the future. eGPS is encouraged by the fact that our subscribers are keeping their subscriptions in this hard time. I believe it is because it allows them to maximize their profits on the work they are able to get.

Georgia hosted the ION conference this year. eGPS spent a few days there. One thing that really stuck out was that the GPS marketplace is growing.

In fact, we noticed that there are many new GPS equipment manufacturers with new and innovative products emerging. Most of them offer substantial cost reductions from what most of us pay now for our hardware. eGPS is willing, as always, to assist in configuring these new systems on our service. The coming year will certainly prove interesting as we watch these manufactures grow in both Georgia and Florida.

Even in economic times like these, eGPS stands committed to our subscribers. With coverage expanding and continued fine-tuning of our base station locations, we continue to provide reliable corrections. In the third quarter we added a new station in Jasper, Florida that is now used in our Georgia and Florida networks was added. Base stations in Cordele, Greensboro, and Tifton, Georgia were re-located to better locations. As we continue to monitor all our stations, we are happy to report that in these cities we have seen measurable improvement to our reliability and precisions.

Three additional base stations have been submitted to the NGS CORS program for the GPS users of Georgia, specifically the Brunswick, Tifton, and Blakely areas. We hope that every surveyor that uses OPUS or CORS services of the NGS will appreciate our participation in NGS' programs. Although it is very expensive to comply with NGS guidelines for CORS, the benefits for the GPS users of Georgia are too numerous to count.

The 4th quarter of '08 will have its challenges. If the staff at eGPS can help you with yours, please give us a call.



Lonnie Sears, RLS
President, eGPS Solutions