

# The ROVER Reporter

A QUARTERLY PUBLICATION OF eGPS SOLUTIONS

SPRING 2008

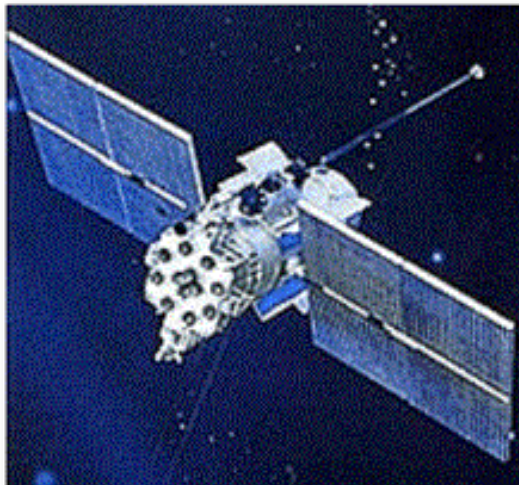
## GLONASS Across Georgia

**G**LOONASS coverage for Georgia is about to spread far and wide! This spring, eGPS Solutions will be extending the reach of the network's original GLONASS coverage area to cover the entire state of Georgia. Prior to this system upgrade, eGPS Solutions' GLONASS coverage was limited to approximately 10,000 square miles centered over the metropolitan Atlanta area and stretching out from there to encompass a swatch of North Georgia from Athens, west to the Alabama border. Before the spring is over, however, surveyors all over Georgia, with properly outfitted equipment, will be able to take advantage of the GLONASS signals, as well as the new L2C signals from the new GPS Block 2R and future Block 2F satellites.

Field testing of the new GLONASS satellite signals is well underway. The eGPS Solutions staff has been out and about the state vigorously making sure network customers with GLONASS, and those who wish to upgrade, are set to go. Reports as of early April confirm coverage and accuracy for the metropolitan Atlanta area and the vicinities around Savannah, Brunswick, Columbus, Tifton, Macon and Hiwassee. Additional areas are slated for testing as the month progresses. Subscribers will be updated by e-mail and at meetings as soon as GLONASS signals and accuracy in other areas can be confirmed. Any and all network users are invited to supply us with feedback validating the availability and usefulness of GLONASS and L2C signals.

eGPS Solutions has also been diligently testing NTRIP mount points in order to provide GLONASS corrections for all network subscribers - without regards to which brand of equipment they use. VRS CMR+ works well for Trimble users and they should not experience any equipment problems during the network upgrade or thereafter. The VRS RTCM 3.0 format, however, required for Leica and Topcon subscribers will be discontinued. GLONASS operation for users of these brands of equipment may experience some outages; however L1 and L2 operations will still function. The eGPS Solutions staff will continue testing mounting point configurations to make sure all users of the company's network experience flawless operations during the upgrade process.

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### Welcome to Our Newest Subscribers:

(Use the links to visit their web site)

[James M. Anderson & Assoc.](#)  
[Fulton County GIS \(GA\)](#)  
[W.L. Hailey & Company](#)  
[Leroy R. Hall Surveyors](#)  
[Hussey, Gay, Bell DeYoung](#)  
[Hydrographic Information Services](#)  
[M & R Mapping](#)  
[Paulding County \(GA\)](#)  
[E.R. Snell Contractors](#)  
[VanHorn & Associates](#)  
[Wellston Assoc. Land Surveyors](#)

### Mark Your Calendar:

#### April 26- 28

ACCG Annual Meeting  
Savannah Civic Center  
Savannah, GA

#### May 14 - 15

Construction Expo  
Georgia World Congress Center  
Atlanta, GA



[www.egps.net](http://www.egps.net)

# SAMSOG Technical Seminar Scrapbook



Above: Ginger Walker from the SAMSOG office gets chili on her dog!

Right: Georgia surveyors will agree, with chili or "naked," Varsity dogs taste great!

Below. Jeff, on right, with SPSU survey student



Left: Unique hat fashion

Right: One of Dale's admirers



Left: Lonnie serves peach pies for dessert



Left: Lined up for chili dogs

Right: Martha and her rental display



# Looking Back at SAMSOG

Every January the Surveying and Mapping society of Georgia, or SAMSOG, conducts their annual Technical Seminar at Southern Polytechnic State University in Marietta. And each year hundreds of Georgia surveyors attend the classes, vendor expo and other events. eGPS Solutions has been attending since 2005...or each year since our existence. The eGPS Solutions team enjoys meeting the surveyors and taking part in as many ways as we can.

This year we presented two Resource Training Sessions. The first one was led by Lonnie Sears. Lonnie conducted a "Roundtable Discussion" that covered modems, protocols, productivity, processes, NGS Guidelines, and eGPS Solutions network services.

Later that day Jeff Little conducted a seminar covering "Best Management Practices for GPS Field Operators." Jeff clarified why some GPS users do not achieve the accuracies promised by vendors and how to troubleshoot these situations.

Both presentations were given before standing room only crowds and the company received several requests to present at other events.

Since taking over the room off to the side of the main exhibit floor in 2006, our marketing team has been challenged each year with how to fill all the space. This year we went with a NASCAR theme for crossing the finish line...finishing basic coverage that is! To keep our service top rated, we'll never really be "finished!" Then, of course, we had to bring back The Varsity to serve hot dogs, chili dogs, peach pies and frozen orange desserts during Friday's lunch. The Varsity was such a welcome addition to last year's football theme that well, *the Varsity goes with race cars too!*

Martha's equipment rental display and information handouts generated a lot of

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# Product Showcase

## All Cell Phone Providers Are Not Alike

The eGPS Solutions rental fleet has recently had to add additional survey units and cell phones to a growing rental clientele that now includes an expanding customer base in South Georgia and Florida.

As a result, we have been testing cell phone providers to see which company provides the best coverage and most reliable service and have found that the information varies. Cell phone towers are all over; just because we see them does not mean that there is cell coverage. The towers are owned by cell companies and the reception depends on which company is the primary owner. We have concluded that in Georgia, from Tifton north, Verizon has the best coverage, reliability and service. In Georgia, from Tifton south, Alltel proves to be the better provider. Alltel was also our top performer in Florida and we put them to the test throughout the state.

It is important to note that Alltel flip phones work in extended networks whereas a Verizon flip phone will not function in data roaming. Verizon requires you to use PDA phones to have the necessary data roaming function.



eGPS Solutions' is committed to keeping a supply of the various cell phones needed by our rental customers. We have tested and familiarized ourselves with the unique features of each provider, cell network, and phone configuration. Knowing where our customers will be working is important. If during the rental period a customer needs to go to work in a different coverage area, we can easily swap out Alltel and Verizon phones for them.

We are very excited about the growth of the rental fleet and look forward to improving it further in the future. If you are interested in more info about eGPS Rentals, please contact Martha Vaughn at 770-695-3361 or [mvaughn@egps.net](mailto:mvaughn@egps.net).

## QUICK FACTS

### GPS

24 Satellites  
Currently 32 w/ replacements in orbit  
6 Orbital Planes  
4 Satellites per Plane  
4 Spare Satellites  
Orbit: MEO - 20,200km circular  
55° Inclination  
Orbit Period: 12 Hours  
Master Control: Schriever AFB (CO)  
Program Office: Space and Missile Systems Center, Los Angeles AFB  
5 Monitoring Stations: Hawaii, Kwajalein, Ascension Island, Diego Garcia, Colorado Springs  
3 Ground Antennas: Kwajalein, Ascension Island, Diego Garcia

### GLONASS

24 Satellites  
When system is completely in orbit  
3 Orbital Planes  
8 Satellites per Plane  
3 Spare Satellites  
Orbit: MEO - 19,100km circular  
64.80° Inclination  
Orbit Period: 11Hrs; 15 Minutes  
Ground Control: All within former Soviet Union  
Sources:  
<http://www.spaceandtech.com>  
<http://www.losangeles.af.mil>  
[http:// en.wikipedia.org/wiki/glonass](http://en.wikipedia.org/wiki/glonass)

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## GLONASS

The National Geodetic Survey (NGS) enforces strict guidelines that must be followed when any changes are made to a CORS station participating in the NGS CORS program. eGPS Solutions' network upgrade will therefore facilitate the re-submission of log sheets, photographs and other information for several of the CORS stations in our network to maintain their CORS status when they are converted to transmit GNSS signals. Network subscribers should not experience any interruptions while eGPS Solutions makes the modifications to the effected stations or during the time it takes us to provide to the NGS with the required materials for these stations to maintain their CORS status. Upon completion of the network and base station upgrades, eGPS Solutions will be providing one of the most progressive RTNs available to GPS users anywhere today.

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## SAMSOG Recap

of interest and she enjoyed meeting everyone during her first trip to the SAMSOG event.

All in all, it was another successful conference for eGPS Solutions and we hope to see many of Georgia's surveyors at the SAMSOG Annual Summer Meeting in July.



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# President's Corner

**W**ith the dogwoods about to bloom, we realize just how fast paced the winter has been. In the last quarter eGPS Solutions has completed expansion projects in both Georgia and Florida...*just in time to get new ones started!* We've also attended trade shows, conducted Roundtable Meetings and continued with the development of our equipment sales and rental division. All of it has been very exciting for the eGPS Solutions team as we are committed to improving the quality of our network and the services we provide to our customers.

Expansion projects over the winter months improved our densification in both Georgia and Florida. Even though we have experienced some issues with the new versions of TDS operating on the GEO++ platform, we are continuing to iron out the kinks and remain optimistic that those will all soon be history. Of course, expansion is ongoing for us and this Spring we are looking forward to adding to our GLONASS coverage area.

eGPS Solutions exhibited at some new venues this year such as the HYPACK (see our Winter 2008 newsletter for more info) and GPAG conferences. We also took time to exhibit, present and mingle at the SAMSOG Technical seminar. As always, it proved to be a great time to catch up with Georgia's surveyors and our race car theme of "*crossing the finish line*" made for a lively exhibit. We were pleased to receive many training requests as a result of conducting two resource training sessions during the conference. Martha's rental display and information made an impact as that business has experienced quite an improvement since the show. However, we stole the show during Friday's lunch break for a second year in a row as we served up hotdogs from The Varsity. Clearly chili dogs are a favorite with surveyors!

Lastly, on the economy - as a true testament that eGPS Solutions' services actually makes money for our customers - the company's number of subscriptions continues to hold strong even though tougher economic times have resulted in several users reducing staff. I firmly believe that current economic trends prove to make good our promise that the eGPS Solutions network was a wise investment when we signed on subscribers. New customers are citing efficiency and profitability as their reasons for subscribing. Several had prior knowledge of the company; and some did not. As I see it, the refreshing aspect about new sales in a down-turned economy is that there are still progressive firms willing to invest in their own business. Perhaps they got burned on Wall Street. I don't know. However, I can predict they are seeing returns on their eGPS Solutions investment!



A handwritten signature in blue ink, appearing to read "Lonnie Sears".

Lonnie Sears, RLS  
President, eGPS Solutions