



# THE American Surveyor

A FOOT IN THE PAST... AN EYE TO THE FUTURE Charter Issue

## Field of Flags

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# Field of Flags



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>> By Trenton D. Turk, LS

# At Kennesaw Mountain National Battlefield Park

*In September of 2003, surveyors played an important role as the community of Marietta, Georgia came together to honor the victims of the 2001 terrorist attacks.*

I joined the local Kiwanis Club in Marietta, Georgia about two years ago because it offered me (and our company) opportunities to serve our community in many different ways. In the fall of 2003, my involvement in the club afforded our company an opportunity to help with a very special project known as the “Field of Flags.”

Devan Seabaugh, President of the local club, and Glenn Graham, a fellow member, had conceived the idea for a “Field of Flags” earlier in the year. Devan had seen an article depicting a large field with flags scattered through it, and asked Glenn if a similar project would be possible for our club to do in remembrance of the victims of the September 11th terrorist attack. Glenn has chaired our “flag committee” for years, handling the placement of more than six hundred flags around the community on six patriotic occasions throughout the year as a fund-raising event. He firmly believed that our club could handle this project as well!

Glenn immediately began organizing all aspects of the event. He advertised the effort at each of



*Scott Holcombe of GeoSurvey, Ltd., operates a Topcon AP-L1A robotic station while collecting data for the base map.*

our weekly meetings, soliciting volunteers to help with the assembly of the flags. Committee members began selling the flags for \$10.00 each throughout the community. John Cissell, Ranger for the Kennesaw National Battlefield Park, arranged for a local field at the park to be used for placement of the flags.

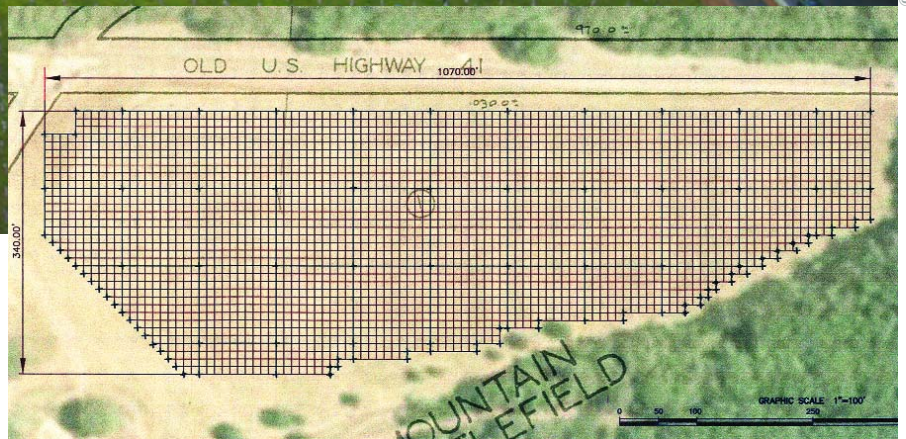
The plan was to place 3004 flags in the field, one for each victim, and keep the flags on display from Wednesday, September 10th until Sunday, September 14th.

*continued >*

# Field of Flags



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Top: Aerial view of the 100-foot grid.

Inset: Portion of drawing created as base map for use when staking the 100-foot grid

Bottom: David Odom and Scott Holcombe utilize a Topcon HiPer GPS RTK remote unit with TDS Ranger controller to set up a base-station and place stakes on the 100-foot grid.



## Surveyors Get Involved

On Thursday, September 4th, I attended our weekly Kiwanis meeting and happened to sit at the table with Glenn Graham. At lunch Glenn shared his concerns about several of the flag project details that still need to get ironed

out, including whether or not the field at the park was large enough to handle more than 3,000 flags.

Each flag pole consisted of a 10-foot section of electrical conduit. The plan was to place sections of rebar throughout the field over which the flags could be placed. I asked Glenn if he had measured the field in any way or if he had determined how far the flags should be placed apart. It turned out that a few measurements had been taken, but no specific plan of action had yet been developed. Realizing that we could provide some valuable help, I volunteered our company, GeoSurvey, Ltd., to prepare a base map and plan for the placement of 3004 flags in the field. With a tremendous look of relief, Glenn graciously accepted my offer.

The following Thursday afternoon, surveyors David Odom and Scott Holcombe visited the field and took the necessary measurements to establish the size and configuration of the open field. A control traverse consisting of four points was established using a Topcon AP-L1A robotic instrument combined with a TDS Ranger data collector. After the control points were established, they located the edge of the woods and the adjoining roadway for use in developing the base map. Later that day, they transferred the collected data into AutoCAD with Carlson software and prepared a simple base map depicting the existing features of the field. An aerial photograph of the site obtained online from *MapQuest.com* was inserted into the drawing as a background image.

On Friday morning, I contacted Glenn and requested that he drop by my office. He arrived mid-morning, and we immediately began developing the plan for the placement of the flags.

We quickly determined that the field contained approximately nine acres, therefore, squeezing 3004 flags onto it would be a challenge. Areas also had to be reserved for crowd assembly and for a large tent to be set up near the flags. We set up a baseline along the longest axis of the field parallel to Old Highway 41, then proceeded to draw a grid on the field using 10-foot squares. We blended the grid into the edge of the woods on the rear of the field, and angled the grid along the side of the field nearest the

park center and gathering area.

After setting up the grid, we used the ‘array’ command to copy a small circle to every grid intersection. A quick entity count in AutoCAD revealed 3,055 circles, or flag positions. We trimmed out 51 circles, leaving us 3,004—which was exactly what we needed!

### Bring on the Lights!

Using Carlson software, we established point numbers on 100-foot squares throughout the grid. On Tuesday morning the points were uploaded into a TDS Ranger data collector for stakeout. David Odom and Scott Holcombe returned to the site and placed stakes at each of the 100-foot grid intersections. We utilized a Topcon GPS RTK system to stake the points. A “site calibration” was performed on the four previously established control points. After the system was calibrated to the site, we simply followed the arrow to each point number. Each 100-foot grid intersection was marked with a stake and the corresponding point number. Due to the irregularity of the grid, we also staked every 10-foot grid point along the woods line. A plan with the point numbers was provided to Mark Wade of Wade Electric and to Glenn Graham. Employees from Wade Electric used a 100-foot rope marked at 10-foot intervals to place the 10-foot grid points on the ground. Paint spots were placed at each 10-foot grid intersection between the 100-foot grid stakes. On this same day, Cobb EMC,

the local electricity supplier, provided and placed four large light poles and spotlights to light up the field at night.

At daybreak on Wednesday morning, September 10th, more than 100 employees of Butch Thompson Enterprises, a local contracting firm, reported to work at the park. Each one grabbed a hammer, a pair of gloves, and several four-foot sections of rebar (all provided by Home Depot in Cobb County) and set right to work. Within two hours, stands for 3004 flags had been placed on an exact 10-foot grid throughout the site.

That afternoon, many Kiwanis Club members in pickup trucks began transporting the 3004 flags from the assembly building in downtown Marietta to the



*Top: Volunteers marked off ropes every ten feet.*

*Past Meets Present – An artillery piece from the June 27, 1864 Battle of Kennesaw Mountain occupies the Topcon HiPer RTK base station.*

*Sections of rebar in place on the grid*



# Field of Flags



Top: One by one, Kiwanians place flags over the rebar stands.

Middle: Visitors gather at the "Field of Flags" on September 11, 2003, to pay their respects to victims of the 2001 terrorist attack.

Bottom: Flowers, stuffed animals, and other tokens of remembrance were placed at many of the flags.



field. By late afternoon the flags were handsomely and uniformly displayed throughout the field.

The team that worked so diligently to get these flags in place before September 11 was rewarded by the look on the visitors' faces when they first saw the flags. People came from as far away as Indiana to walk through the flags and pay their respects to those who lost their lives on September 11, 2001. Many visitors had tears in their eyes as they wandered through the field. Some simply sat at the base of a flag, staring up at the mountain or at the other flags. Others left flowers, stuffed animals, and other tokens of remembrance at the bases of many of the flags.

On Thursday, September 11, The Kiwanis Club held its weekly meeting under the large tent that was set up near the field. Georgia Congressman Johnny Isakson addressed the group and encouraged all to remember those that died in the terrorist attack and those that have given their lives in war since that day. Former Georgia Governor Roy Barnes gave a memorable address. The day concluded with a solemn sunset service, a bagpipe tribute, and a 21-gun salute.

The event was noted on national television on the morning of September 11 on ABC, and was covered by all the local television stations in Atlanta. Articles commemorating the event were published in the *Marietta Daily Journal*,



*The Atlanta Journal-Constitution*, and other publications.

Glenn Graham has already been approached by many Kiwanis members and others in the community about making the Field of Flags an annual tradition. Rest assured, we at GeoSurvey will do our part in the future to contribute to this wonderful project. *A*

*Editor's Note: To learn more about photographer and portrait artist Jay Fletcher and see examples of his work, visit [www.fletcherphotography.com](http://www.fletcherphotography.com). All other photos by Trent D. Turk.*

Trent Turk is President of GeoSurvey, Ltd., located in Marietta, Georgia.