



LETTER FROM THE PRESIDENT

Dear Clients and Associates:

I would like to take this moment to thank all of you for helping make this a successful year for GeoData.

It is my hope that you found 2002 to meet and beat your expectations. There is no denying that the past year has been historically difficult for everyone, but we can pray that it will get better.

Digital mapping technologies are growing at an amazing rate. Almost daily a new Remote Sensing technology is introduced to the marketplace. It is truly fascinating to work with the accuracies and qualities of these new technologies. Here at GeoData we strive to stay on top of the many and ever improving abilities in all facets of the mapping industry, so much so that it actually makes our jobs fun and fulfilling.

I am pleased to announce GeoData was awarded an open end contract with the North Carolina Department of Transportation for the thirteenth consecutive year and we look forward to working with them.

From all of us at GeoData Corp. we wish for you to have a great rest of the year and an even greater 2003!

Sincerely,

James M. Salmons, PLS



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To LIDAR or not to LIDAR.....



It seems that periodically a new technology is introduced and quickly becomes the only thing people are talking about. Unfortunately during these periods, the real advantages and disadvantages of a new service often get distorted.

Lately, this phenomenon seems to be happening with LIDAR technology. With the recent publication of North Carolina's Floodplain LIDAR data sets, the photogrammetric industry and its' clients have begun to question just what exactly can the data be used for and what consistent accuracies can be expected from it. Conflicts between experts and lack of standards for LIDAR production tend to confuse these issues. The strength of LIDAR and its uses will ultimately overcome these issues and become a very valuable photogrammetric tool.

LIDAR mass point collection technology is a fast and efficient way to complete large DTM/DEM projects within certain accuracy tolerances. The largest variable in LIDAR projects require the introduction of breaklines through traditional photogrammetric methods to meet standard historic specifications. Another important variable in LIDAR is the unpredictability of the filtering process used to remove erroneous points such as vegetation, building, and water measurements.

LIDAR is a technology that has potential. Factors to be considered when evaluating LIDAR usage:

- Cost benefits are prone to larger projects
- Unpredictability of the Filtering Process
- Accuracies without incorporation of supplemental breaklines
- Un-uniform standards for LIDAR systems

Based on these and other variables it is necessary to evaluate each client's project on an individual basis.

Call us today for your free evaluation.

(919) 269-5744 or 1-800-966-4MAP

IT'S THAT TIME AGAIN

Well, it won't be long now and the leaves will be off the trees. Now is a great time to start planning your next mapping project.

The airplanes are getting ready to take to the skies and the cameras are getting ready to capture your photography.



We hope you will visit our newly updated web site at :
www.GeoDataCorporation.com

NEW PERSONNEL

Rodney Hough, PLS, brings to GeoData fourteen years of experience in all aspects of Photogrammetry. Rodney began his career at the N.C.D.O.T. He is a serious career man on the job but he is also a husband and proud father of three young children. He enjoys landscaping and riding his Honda Rancher.



We are happy to have Rodney working with us at GeoData!

PRODUCTS & SERVICES

Services and capabilities include but not limited to:

- Project Planning & Consulting
- Acquisition of Aerial Photography
- Highway Design Mapping
- Aerial Triangulation
- Digital Mapping
- Digital Orthophotos
- DTM (Digital Terrain Model)
- Topographic Mapping
- Volume Computations
- Field Classification
- Data Translation
- 911 Mapping
- Photo Plan Sheet
- CAD Drafting
- Photo Enlargements
- GIS Services

Please call James at (919) 269-5744 with any questions you may have or fax us the above information at (919) 269-0413. We will do our best to respond within 24 hours. If you would rather send the information via e-mail, the address is jsalmons@geodatacorporation.com

*It's getting
that time again...*

LOW ALTITUDE & HIGH ACCURACY MAPPING

GeoData Corp was recently selected to provide NCDOT High Accuracy Pavement Profiles for projects U-2525B and R-3833B. The photography was obtained by RC&A out of Spartanburg, SC utilizing a Bell Jet Ranger Helicopter. The helicopter is equipped with:

- Turbine engine for reliability and smooth operation
- Rotor system Chadwick balanced for minimum rotor induced image motion.
- Radar altimeter system for altitude control.
- GPS for direct navigation to job site.
- Differential GPS for precise positioning.
- Custom made FAA approved camera mount.

The camera used was a Wild RC20 Camera System with a FMC or Forward Motion Compensation mount critical for low altitudes. Using a helicopter allowed the photography to be obtained from an altitude of only 300'. This altitude equates to a photo scale of 1"=50'. As we know, the lower the altitude the more accurate the mapping. The goal of the low altitude photography was to obtain high accuracy profiles across heavily traveled highways without endangering field crews as well as not disrupting traffic. The accuracy obtained was +/-0.08 foot with a root mean square (rms) error computed for the extended control points being a minimum of 0.03 feet. Both projects are scheduled to be complete by the end of November 2002.

