

GSSI Names New President

Geophysical Survey Systems (GSSI) has announced that Christopher Hawekotte has been appointed President of the company. He succeeds Dennis Johnson who is leaving on October 1 to become President of UltraVision Security Systems (UVSS). Hawekotte joined GSSI in 2003 as Vice President of Sales and Marketing and has helped drive the company's rapid growth over the past 3 years. Prior to GSSI, Hawekotte served in a variety of sales, sales management, business development and marketing roles at NetTest (now Anritsu) and Tektronix.

UVSS was created by GSSI in 2004 to focus on developing ultra-wideband systems (UWB) for the security and search and rescue markets. "We discovered that the technology GSSI commercialized over 35 years ago for the investigation of the earth and man-made structures could be adapted for remote sensing in other applications," says Hawekotte. "We have already developed and sold systems that can be effectively used for locating victims trapped in debris such as collapsed buildings. And we have patented solutions for concealed motion detectors that have tremendous potential in the security industry." In October, UVSS will move to new offices in Salem, New Hampshire.

"We had reached a point in our evolution where it made sense to separate the two organizations," explained Johnson, "and create independent leadership for each company. We've spent a considerable amount of time over the past couple of years getting UVSS 'off the ground'. During that same period, Chris has been instrumental in driving GSSI's core business, so it was a natural choice to have him assume the lead role in the company."

"GSSI has a long history of technical leadership and innovation," says Hawekotte. "I look forward to working with our customers and employees to continue to develop new and better solutions for subsurface imaging. Our recently introduced EM Profiler, for example, is the first truly new electromagnetic induction design to come to market in many years. It incorporates the latest technology, providing users with a high-performance EM profiling instrument that is easy-to-use. We will continue to lead the way with other professional GPR and EM products for our customers. This is a really exciting time at GSSI."

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Profiler EMP-400 Update

The testing and evaluation of the Profiler EMP-400, GSSI's newest Electromagnetic (EM) induction instrument, continues apace. The Profiler is a lightweight, portable multi-frequency system featuring wireless Bluetooth™ data communication to a TDS RECON 400 PDA that acts as the platform for an easy to use graphic user interface.

Construction and beta testing of customer evaluation units has begun. Systems are currently being tested and evaluated by GSSI personnel and users both in the U.S. and overseas. The EMP-400 was designed for near-surface investigations. These include archaeological investigations, shallow geologic and soils mapping, contaminant and contaminant source identification and delineation and metallic target detection.

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FWD/GPR Vehicle

GSSI and Foundation Mechanics recently delivered a powerful FWD/GPR vehicle to the City of Los Angeles and two more to the Montana Department of Transportation. These new vehicles make it possible to detect road issues while collecting and storing pavement thickness information at each falling weight deflectometer (FWD) test location.

Typically, core samples are taken from roads at periodic intervals to obtain road pavement thickness information. With GPR and FWD included in the same vehicle, users can automatically collect accurate pavement thickness at each FWD location and store that information in a single database. This non-destructive technique offers tremendous advantages, which include cost savings, safety, and dramatically increased data availability. Both systems can also be used independently of each other within the vehicle.



Please call GSSI's Robert Parrillo at 603-681-2059 if you would like more information.

Tech Support Site

Have you upgraded your GSSI products lately? RADAN version 6.5.1.1 will soon be available for download. New features include:

- Ability to Import data from the EM Profiler
- "Flip Data Files," which allow data to be observed from an inverted view. This is an intuitive approach while viewing ceiling data.
- Ability to show and turn off individual layers or regions
- Ability to change display gain while in 3D view
- "Multiple Region" additions. Advantages of this concept include:
 - Relative position of individual regions in a Super3D file can be manipulated on-the-fly
 - Super3D files can be constructed simply by appending existing 3D files
 - Users can gain individual regions differently in a Super3D file
 - Users can choose how to superimpose individual regions in a Super3D file
 - The integrity of individual regions in a Super3D file is maintained (i.e. the same resolution is achieved). This means that files with different scan spacings and profile line separation distances will be shown with the appropriate interpolation.

GSSI Launches Online Store!

U.S.-based customers can now order GSSI parts and accessories from our convenient online store. Visit www.gssisales.com to see how easy it is!

All items in the online store carry the standard GSSI warranty and are typically available for immediate shipment. Your GSSI representative can answer any questions you may have, and after your order is placed online, it will be processed immediately.

In addition, the new and improved GSSI web site www.geophysical.com launched September 5th and includes many updates and new sections.

Please note that the GSSI online store is currently accepting orders from US customers only.

GSSI Has Moved!

The GSSI corporate office have moved to:

12 Industrial Way
Salem, NH 03079-4843

All phone numbers and email addresses remain the same.



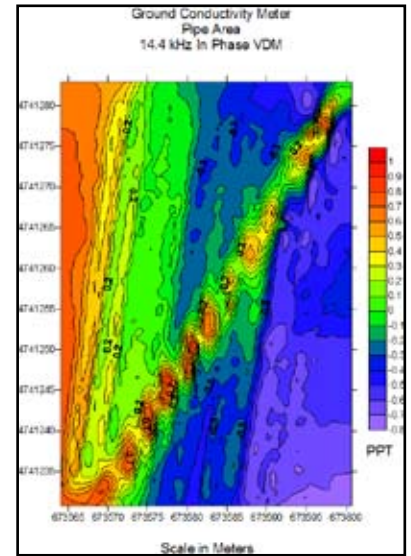
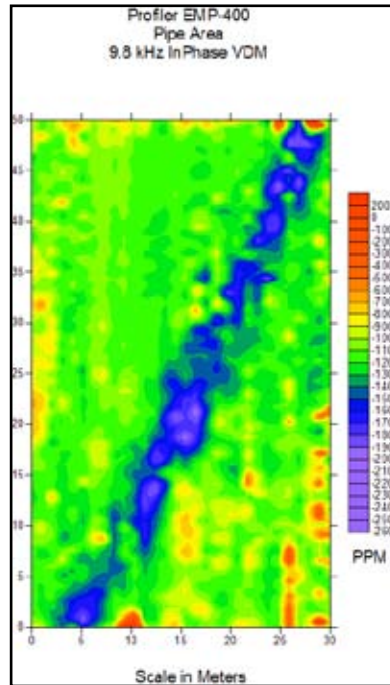
Profiler EMP-400 Update (continued from Page 1)

A comparative example of Profiler EMP-400 data and data collected with a commercially available EMI instrument is illustrated. As one can see, signal drift is a significant problem using older instruments, which do not incorporate the advanced electronics and software control employed in the Profiler.

Using a proprietary source cancellation and calibration system, the Profiler EMP-400 is designed for ease of use, sensitivity, and survey repeatability. The system's primary data output is the Mutual coupling ration (Q) for both the In-Phase and Quadrature in parts per million (PPM), as well as apparent conductivity (σ_a).

The system is environmentally sealed and includes a wireless TDS RECON-400 PDA with rechargeable Li-Ion batteries, AC battery charger, and a spare battery holder for eight (8) AA batteries, a carrying strap, a rugged transit case

and instruction manual. A Holux™ WAAS GPS is also included. The complete system list price is \$15,900. For a limited time an optional low-carry handle will be offered with the system at no additional cost.



Training Class Schedule for 2006

2006 GSSI Training Classes - North Salem, New Hampshire				
Month	StructureScan Optical	UtilityScan	RADAN	Bridge or Highway Mapping
September	11-13	14-15	26-28	19-20 Highway
October	10-12	16-17 10/31-11/1		19-20 Bridge
November	7-9	14-15		
December	5-7		12-14	

Please contact GSSI as quickly as possible if you are interested in a training class, as class size is limited to 8 in order to be most effective.

For more information, visit www.geophysical.com/training.htm.

2006 Shows and Conferences

SEG 2006	October 1-6	New Orleans, LA USA
Geological Society of America	October 22-25	Philadelphia, PA USA
ASNT Quality Testing Show	October 23-27	Houston, TX USA
Association of Environmental & Engineering Geologists	October 30-November 4	Boston, MA USA
World of Concrete 2007	January 23-26, 2007	Las Vegas, NV USA

Training Tips

Simple Fix for Undergained Data

Overview:

The use of 5 gain points with certain time ranges can sometimes lead to the direct wave being positioned between gain points 1 and 2. Since the direct wave is often the highest amplitude wavelet in the trace, the SIR-3000's auto gain servos will depress the adjacent gain points (1 and 2) in order to prevent signal saturation (clipping). This can result in the top 20% or so of the time range to appear undergained (Figure 1).

The Fix:

In order to correct for this, you will need to manually adjust the Offset.

1. Under COLLECT>POSITION, toggle the Auto servo to Manual.
2. Highlight OFFSET and click enter to bring up the offset value dialog. You will see the full trace. Click the UP arrow and you will see a black, horizontal line on the data. Reposition this line close to the first positive (right hand side) rise of the direct wave. You should get an offset number near 0 (Figure 2). Click the Right arrow to make the change.

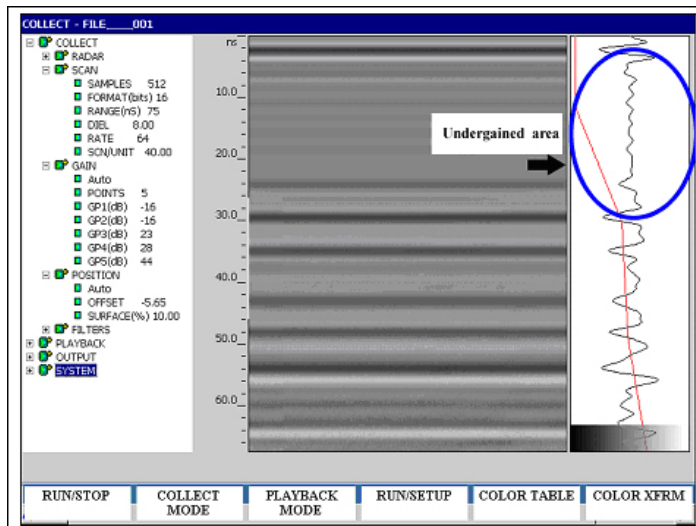


Figure 1: Undergained data.

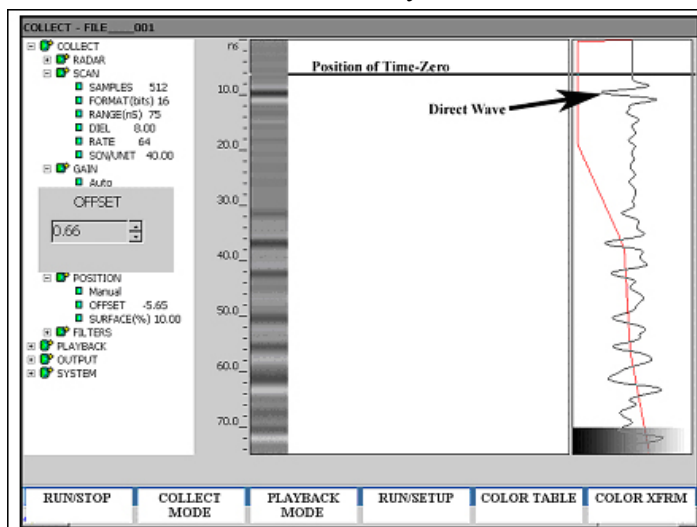


Figure 2: Manual offset adjust.

3. Next go to POSITION>SURFACE(%) and change the surface % to 0.00.
4. Toggle the Auto gain servo to Manual and then back to Auto and you will see a better normalized trace (Figure 3).
5. Save these settings under SYSTEM>SETUP>SAVE.

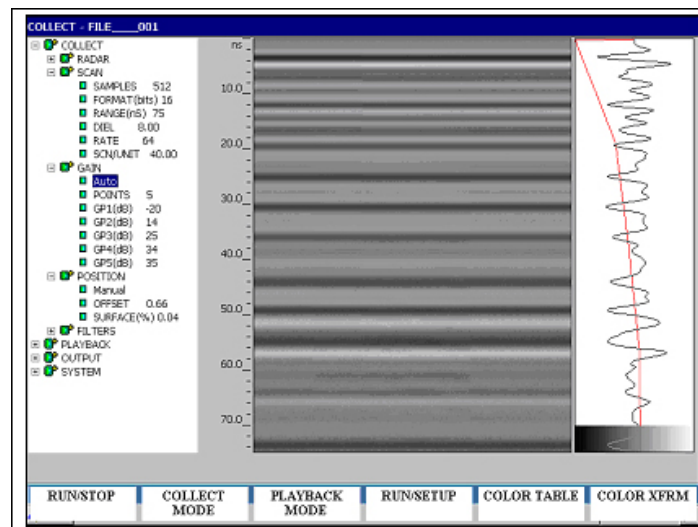


Figure 3: Correctly normalized scan.



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Subsurface Imaging™

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