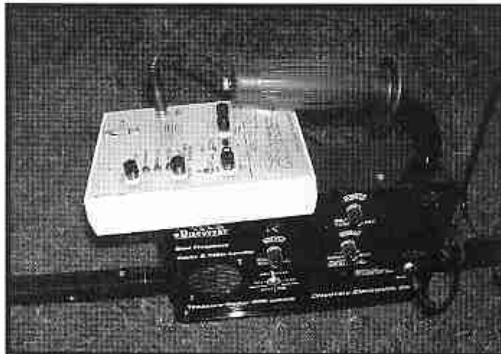


A POOR MAN'S GPR

Ground Penetrating Radar is the wave of the future for relic hunters. Unfortunately, the price tag kept it out of reach for most hobbyists... until now.

by Jim Fariello

Every treasure hunter has dreamed of having in their arsenal of equipment a machine that will look into the ground and display an image of what is under their feet. Slowly but surely that dream is starting to become a reality over the past few years with the availability of more high tech equipment. The new equipment that is being developed and introduced into the hobby of metal detecting will make dreams like



The Arc-Geo Mini, shown here mounted on a Discovery two-box metal detector. A GPR is not designed to take the place of a metal detector, but when used in conjunction with one, the combination can be a treasure hunter's dream.

that come true. Treasure and relic finds in the next few years will continue to get even better as old sites are re-discovered and worked in a new way with new high tech equipment.

Most technology available to us hobbyists is in the form of more sensitive metal detectors. Items like Ground Penetrating Radar have remained too expensive to utilize on a regular basis. But lately, that has been changing with the introduction of the Arc-Geo Logger. I call my unit the "Poor Man's Ground Penetrating Radar".

I first discovered the Arc-Geo Logger two years ago

at the Texas Treasure Show in Tyler. I had a booth at the show and this was my fifth year as an exhibitor. Over the years, I have always enjoyed the opportunity to talk to and visit with treasure hunters and manufacturers of treasure hunting equipment. This opportunity has always given me an edge by keeping me up to date on new developments in our hobby.

While visiting with folks at my booth, I had the opportunity to meet a very talented person in the field of electronics, Timothy Williams. This young man was an inventor and owner of a company called LRLMAN. Tim took the time to show me his new Arc-Geo Logger that he had designed and was planning to market for treasure hunting. Thinking that this was just the sort of thing that I had been looking for to get that edge in this field, I immediately purchased a unit. If what Tim was telling me was true, (and as it turned out, it was), it was a no brainer for this old boy.

Like most detectorists, I had often dreamed of "seeing" into the ground. The Arc-Geo Logger was about to open up new areas I had put on the back burner



The author is shown here first setting the grid and then walking it using the Mini unit. Once recorded, the grid findings can then be saved for future reference.



until this new high tech equipment became available to treasure hunters like me.

I asked Tim if he had a booth at the show and was told by him that this was his first time at the treasure show. Still excited over my discovery, I invited him to use part of my booth area and set up his equipment to show other diggers. It wasn't long before another treasure hunter came by and purchased the second unit that Tim had with him. This treasure hunter was actively searching for the Knights of the Golden Circle treasures and now uses his unit in all of his searches for this well documented and legendary hoard.



A laptop or PC is required to download the information obtained from the Arc-Geo unit.

Having already sold all the units he had with him, I loaned Tim my newly purchased Arc-Geo for demonstrations at the booth, allowing other treasure hunters the opportunity to check it out. I wasn't the only one excited about the prospects of using this product in treasure hunting!

As excited as I was about using the Arc-Geo Logger in the field, life sometimes has different plans for us. For me, it was a heart attack not long after buying the unit. I am doing well now, so it's a sure bet that I will be doing some serious hunting this coming year utilizing this "poor man's GPR."

In 2006, I attended the World Wide Association of Treasure Seekers Rally in Oklahoma. Tim was there, so I had the opportunity to get one-on-one field training from the man who invented the equipment. The training I received was an eye opener on what I had purchased. I soon discovered that the Arc-Geo Unit worked far beyond my dreams and expectations. It wasn't long before other hunters at the event came over to our training area to see what we were doing. Tim now took the opportunity to show others what the unit could do. Like me, most were

SO, JUST WHAT IS GROUND PENETRATING RADAR?

Much like regular Radar, GPR is used to "see" abnormalities buried beneath the ground. A transmitting antenna sends radio waves into the ground. When the wave hits an object or disturbance, the receiving antenna records the variations in the signal. By translating the data, this can show voids, foundations, underground structures, cables and more.

Although mainly used in the construction and geological industry, it is fast gaining acceptance in the archeological community with outstanding results. Its use in the hobby of treasure and relic hunting has been limited by price and the vast learning curve needed to operate most units. With the introduction of the Arc-Geo, it's only a matter of time before this and other units are an accepted part of our hobby.

Up until the introduction of the Arc-Geo units, the only systems available were industrial systems, some of which run well over \$100,000 new. Want a bargain? Here are a few used industrial grade GPR systems we found for sale:

Zond GPR, \$15,026

GSSI SIR-10B, \$12,000

Mala Ramac 250, \$24,000

GSSI Pathfinder, \$28,575

But don't despair: at least one of the above was listed as "Almost like new." Now, *that's* a deal!

impressed with the potential of the device.

Although much more affordable than any similar units, the Arc-Geo Logger was still over \$1200. But wanting treasure hunters with limited funds to have an opportunity to use this technology, the company recently unveiled the Mini Unit, a scaled-down version of the bigger Logger. Priced at \$598, the Mini is less than half

The future of metal detecting is here now!
Target Imaging! Using the Arc-Geo Logger
and metal detector.



Now you can use your V8 or 2 line to plot and view your sites. See the shape and intensity of the target. The Arc-Geo logs the signal output from your leadpoint jack and sets the data against a grid of X, Y. Download into your computer and view all targets within the plot. Save time and keep records of your sites. Easy to setup and operate. Can be used with many detectors. Check out the Arc-Geo field report on my web site.



1" pipe casing 12 feet down

30' view of pipe casing

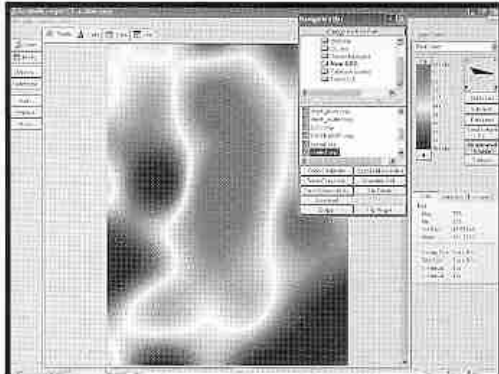
Web: www.LRELMAN.COM Email: LRELMAN@ya00.com
Phone: 952-994-8294

the original's price, yet does almost everything that its bigger brother does. This newer unit has less memory, and will do only one large grid. To most of us, though, that's no problem because the bigger Arc-Geo Logger has much more memory than what most of us will need.

Over the past few years the FCC has taken a very hard look at the Ground Penetrating Radar. The possibility of a permit and licensing system of such Ultra-Wide Band

equipment may make owning and operating any GPR a lot harder as time goes on. Ground Penetrating Radar is very high priced and the presentation is very hard to understand without formal and extensive training. The commercial-grade GPR units are very good equipment but hundreds of dollars for the Arc-Geo Logger compared to the many thousands of dollars for the GPR really makes this a no brainer for us poor peasants.

Will this ever take the place of the more expensive Ground Penetrating Radar units on the market? Probably not, as there are uses for the technology that demands commercial grade GPR capabilities. But for the average treasure hunter and digger, it's the closest thing to being able to "see" into the ground that we may ever get.



The program can be interpreted to "see" what's under the ground, including disturbances in the ground such as privies and old filled-in holes.



About The Author

Jim Fariello is a retired Chief of Police and has been metal detecting sense 1972. He was the first president of the World Wide Association of Treasure Seekers and is associate director of Earth Ocean Explorations. He also collects treasure magazines, which he often buys and sells on e-Bay.