

YOUR CONTROL AND MONITORING COMPANY . . . JUST GOT BETTER!

"MSE Technology Applications Inc. announced Tuesday that it has purchased the assets of Tetragenics, a subsidiary of Touch America ..."

"We are delighted with this exciting acquisition...Tetragenics gives us additional products and skills and unique proprietary technology applicable to government and industry opportunities that we have targeted as attractive for us," said Vince Tonic, MSE Technology Applications president . . .

It all started in 1972 when some clever engineers used a computer to automate a power plant (the first such automation in this country). What started as an idea, became a department, evolved into a company, and helped form an industry. Now 31 years later, that company, Tetragenics, is still providing alarm and control systems and automation services, and still evolving and forming new partnerships of its own.

Beginnings .. In the early 1970s, the Automation Department of the Montana Power Company (MPC) successfully synchronized and started hydroelectric generators remotely. These pioneering engineering efforts in hard-

ware and software design became the basis of Tetragenics. Since then, we have advanced the product lines and continued to provide innovative monitoring and control systems. Tetragenics became an industry leader and specialist in Supervisory Control and Data Acquisition (SCADA) systems, Communications Monitoring and Control Systems, Remote Terminal Units (RTUs), and system integration.

As with most companies, we changed and evolved over the years: from an automation department of MPC, to a subsidiary company, to a division of a telecommunications company (MPC reorganized into Touch America), to being on the short list for closure in 2002 due to strategic business issues.

But wait! After all those years, the Tetragenics employees and customers had become tenacious, loyal, and inventive. Enter MSE Technology Applications, Inc., a nationally known technology development company. The products, skills, and people of the two companies matched. And on October 16, 2002, Tetragenics, and its faithful and positive

Continued on page 6 ▶

IN THIS ISSUE



- Your Control Company Just got Better
- People and Experience Still Working for You
- Spotlight: Traverse City Light & Power
- MITEC Brings High Tech Services to You

Familiar Faces and Experience Still Working for You

Over the years, one of the greatest assets of Tetragenics has been its people. And through our latest transition to MSE, some of you may be wondering who made the move and if your project manager is still your project manager. Well, our core project people are still here ready to work with you...again. But now, you not only have the Tetragenics people (some are highlighted in this issue), you also have over 200 additional people to assist you with expanded products and services.

Continued on page 2 ▶



PEOPLE AND EXPERIENCE STILL WORKING FOR YOU

HIGHLIGHTS

Continued from page 1 ... Working for you ...

Steve Ostenburg Senior Project Engineer

Steve Ostenburg started working for Tetragenics in 1986, after over 10 years working for a Montana utility company (MPC) as an electrical technician. He was in the original Automation department that was the basis of Tetragenics, which gives him over 25 years of hydro and automation experience. Originally, Steve was responsible for the design of control algorithms for all aspects of hydro automation including generator start/stop and synchronization. Then, as Supervisor of Projects, he was ultimately responsible for the system design, field installation, testing, training, and maintenance of all hydro and substation projects. He supervised eight project managers (all engineers), was project manager on several projects, and helped out the marketing department.



Now, he still supervises projects and is responsible for project accounting, expense account review and approval, project assignment, and scheduling. He handles labor and cost estimates and still helps out the marketing department.

June Tangaro Senior I&C Engineer

June Tangaro has over 23 years of experience in engineering and hydro automation. Joining Tetragenics in 1983, June was experienced in coding, testing, debugging, and writing software manuals for real-time automation and control systems and database editors. At Tetragenics, she managed automation and control projects for Hydroelectric Plants, Communication Monitoring Systems (CMS), and SCADA systems.



Now, she is project manager for several hydro and communications projects. She manages schedules for production tasks, software, drafting, and documentation. Also, she helps design systems and initialize, configure, test, and install software and hardware. June has kept up on her writ-

ing skills and continues to collaborate on user and technical manuals for hardware and software, and she trains customers and end users on the various systems.

Bill Crane Senior I&C Engineer

Bill has been with MPC/Tetragenics since 1977. Like Steve Ostenburg, he started out in 1983 working in the original Automation department that became Tetragenics. He is a registered Professional Engineer in Montana and Washington. Bill is project manager for several SCADA and hydro projects, including projects for the U.S. Army Corp of Engineers (ACOE), the City of Tacoma, and Louisiana Hydroelectric Limited Partnership. As project manager, he is responsible for all aspects of the project, including design support, engineering drawings and documentation, and coordination of support people.



Richard Clark Staff Programmer

Richard Clark has 17 years of experience as a software engineer. He joined Tetragenics in 1986 as a Software Engineer. In the beginning, he developed load control, spill control, pond control, and flow control algorithms. He soon became involved in all aspects of the master system software and editors. Richard was responsible for the first generation of graphic editor tools necessary to initialize a workstation. He developed the graphics workstations that are now standard in Tetragenics systems.



Over the years, Richard has modified the software to work in SCADA, hydro, and communications environments. He is responsible for managing the Tetragenics network, security, and hardware and software upgrades. And he still is responsible for creating new programs and updating existing programs and protocols.

Continued on page 3 ...

TETRAVIEWS

Published by the MSE Tetragenics Division to provide useful information about products, corporate news, and industry events. Please send comments to the editor.

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PEOPLE AND EXPERIENCE STILL WORKING FOR YOU

Continued from page 2....

Jim Campbell Senior Software Engineer

Jim Campbell joined Tetragenics in 1999 as a Software Engineer. He develops software for graphical workstations that communicate through an Ethernet to a master host system. He also works to update Tetragenics software editors for monitoring and control systems in different operating environments. He is a wiz at designing and developing complex software applications with easy graphical interfaces. He also works on developing protocols and is the resident database expert.



Rick Schalk Design Engineer

Rick Schalk is another original Tetragenics person who started out working for the MPC Automation department in 1978 as a senior drafter. He migrated over to Tetragenics and assumed responsibilities of not only senior drafter but also manager of production.



As a drafter Rick uses CAD to produce printed circuit boards and detailed design drawings. He also has trained other assigned drafters. As the manager of production, he manages production and inventory for the Tetragenics division, which includes purchasing, budgeting, scheduling, and supervision tasks.

Dave Lopez I&C Technician

Dave Lopez is our resident technician, tester, troubleshooter, and overall fix everything person. Dave came to Tetragenics in 1997, after working in construction for a few years. His skill and knowledge in building, testing, and diagnosing systems is unparalleled around Tetragenics. He is responsible for all testing and for all supervisory and instrumentation calibrations, soldering, and wiring. He has specialized training in process control equipment, transducers, electronic measuring devices, instrumentation and calibration, and electrical schematics.



Chad Carpenter Senior I&C Technician

Chad Carpenter is the new Senior I&C (instrumentation and control) Technician for MSE. Chad started out in 1993 working for Tetragenics as a project manager for a variety of SCADA system projects. In 1999, he worked for Touch America (sister company to Tetragenics at that time). He oversaw the NMS network used for monitoring and control of remote sites. And he worked on one of the first commercially available LMDS projects launched in the U.S. Now as part of the MSE I&C group, Chad works with the Tetragenics crowd again. He is responsible for performing advanced technical development and analysis functions using established procedures and applying fundamental concepts and practices through his knowledge of engineering and scientific principles in the I&C field.



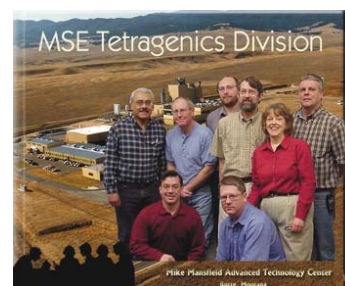
Joe Mullaney Supervisor Instrumentation and Control/Electrical Group

Joe Mullaney heads up the Tetragenics Division as well as the MSE I&C group. He has served as project manager for (and helped design) instrumentation and control systems for various environmental and industrial processes, and the initial design and implementation and system commissioning of plant control and diagnostic instrumentation systems. His experience extends from minor plant control systems to major integrated centralized control systems.



These are just a few of the people you might remember working with on Tetragenics projects. We also have the support of over 200 experienced, qualified, and dedicated technical people. All working together to bring you the best products and services we can. So call us and find out what else we can do for you. ■

All of us welcome you to our new family at MSE.



SPOTLIGHT . . . TRAVERSE CITY LIGHT AND POWER

Beginnings

A CUSTOMER AND A PARTNERSHIP

Way back in 1986, Traverse City Light & Power (TCLP) of Traverse City, Michigan, became one of Tetragenics' earliest Supervisory Control and Data Acquisition (SCADA) customers. Their initial purchase of an IBM AT PC-based MC100 Master and three 400 Series Remote Terminal Units (RTUs) was the beginning of a successful, long-term association. Over the years, as we updated our products, TCLP grew and updated their systems, adding more 400 Series RTUs, advanced 2000 Series RTUs (in the 1990s), and a new MC3000 Master and cold-standby Master/Edit Workstation (1996).

Today, TCLP's generation capacity includes four hydroelectric dam facilities, a 600 kw wind generator, four steam turbines at the Bayside plant, and they are project participants in other plants. Electricity is available to everyone in the City of Traverse City plus portions of townships outside the area. TCLP provides safe, reliable service at competitive rates to over 10,000 customers in their service area.

The Tetragenics system served them well into late 2001/2002. It was during that time that changes and circumstances were occurring at Tetragenics that would affect our customers (read the whole story at www.tetragenics.com under TetraViews).

At TCLP, Glen Dine, TCLP's Staff Engineer, headed up a project to allow TCLP and two other Michigan utilities to share resources and information at two new substations. A new Service Center was in the works as well and would require a new Master system. Glen began talking to Tetragenics Project Engineer, June Tangaro, about options and possibilities. Then, in the middle of the discussions, June regretfully told Glen that Tetragenics would be winding down and ceasing to do business by December 31, 2002. That meant we could not supply equipment, only expertise help.

Out of necessity, Glen began reviewing other SCADA systems. Tetragenics helped by supplying protocol information so that a new Master system supplied by others could communicate with the existing Tetragenics RTUs.

But Wait . . .

While Glen and other customers were searching for adequate replacement systems, the Tetragenics employees (partly due to support from customers) were fighting to stay in business. And on October 16, 2002, we received the exciting news that Tetragenics would continue business as a division of MSE Technology Applications Inc.

As we broadcast the news to customers, Glen was one of the first to reward our efforts and stay with Tetragenics. Immediately, he asked June for a quote on a new Master system with Telegyr 8979 protocol to communicate with the two devices that consolidated and shared information with three Michigan utilities.

Long story short - TCLP purchased the upgraded MC3000 Windows-based Master system. This was one of Tetragenics' first orders under our new owners, MSE. With the help of other TCLP staff members, Joel Casler and Kevin Kennedy (photo insert) and Tetragenics folks, the upgraded SCADA system was installed and tested in February 2003.

Other longtime customers have followed suit with new orders indicating their faith in Tetragenics products, services, and people. We extend our thanks and appreciation and pledge to continue our tradition of excellent customer service under MSE Technology Applications, Inc.

To all our customers - sincerely, Thank You ■



Glen Dine (standing),
Mark Rollenhagen,
Adam Holczman



Joel Casler and Kevin Kennedy



Adam Holczman (operator)
in the control center



STRATEGICALLY LOCATED CENTER BRINGS HIGH TECH SERVICES TO MONTANA

MITEC Montana Information Technology Enterprise Center

When MSE bought Tetragenics, we not only expanded our capabilities, resources, and services, we also moved our offices to a high tech center

called MITEC.

MITEC is the Montana Information Technology Enterprise Center. It provides advanced Information Technologies (IT) services and a secure, strategically isolated data center. It not only serves as the central hub for MSE's IT services, but also provides services for a variety of other customers.

MITEC is experienced in designing, developing, and deploying small and large enterprise-class applications. Using the latest methodologies in application design, software development, database management, Internet technologies, and web-based standards, MITEC can offer the services necessary to extend your business application needs anywhere -- from the computer desktop to the local area network (LAN) to remote destinations around the world. Enterprise application development services include programming the application and system testing using quality assurance procedures and industry standard practices.

The Data Center

MITEC is housed in the historic 100-year-old Thornton building that has been remodeled to house redundant connectivity and reliable power services. The Data Room contains a signal reference grid and steel walls and ceilings. The set up is designed so that your connection is never down and your data is secure. Located in Montana, the center also provides a strategically isolated location that is not on a terrorist's map of major data centers on the West or East coast. This improves backup and contingency planning.

But MITEC is not just about securing your data. MITEC is also a center, from which you can have access to a multitude of IT services, either remotely, or in the center itself. The center offers

- Redundant Internet connectivity
- Conditioned, uninterruptible electric power
- Triple levels of security
- Individual collocation caged areas
- 24x7x365 access to customer equipment
- Office space - network and Internet ready
- Telephone system (voice over IP (VOIP))
- Full service office space leasing

What does it mean for you?

Taking advantage of the services offered by MITEC gives you the tools you need to succeed in today's business; whether your company consists of 2 people or a 1,000 people. MITEC offers

- Secure data backup
- Backup and disaster recovery planning
- Secure access to your business data - from anywhere ... anytime
- Customer relations management (CRM)
- Procedures development
- System and program documentation
- IT data conversion services for applications, databases, network operating systems, and end user systems
- Analysis of the conversion requirements
- Cost/benefit analysis of alternatives
- Design and construction of system conversion routines and filters
- Migration of the new system and data to the target hardware and software environment
- IT Network Management Services for local and area wide networks
- Network requirements analysis
- Network planning, design, and installation
- Network system administration, training, and documentation
- Support services for database management systems
- Internet Web hosting
- Web site development and maintenance
- Electronic imaging (digital based filing)
 - Hosted electronic commerce
 - Data and records services for automated or manual systems
 - Database and software maintenance

And to top it off, the head of MITEC, and the MSE Vice President of Information Technology Services, is Rita Spear, previous project engineer and General Manager of Tetragenics. It is a small world with big opportunities.



TETRAGENICS JUST GOT BETTER

Continued from page 1 ... Company just got better ...

customers, found a home as a division of MSE. "We are delighted with this exciting acquisition ... Tetragenics gives us additional products and skills and unique proprietary technology applicable to government and industry opportunities that we have targeted as attractive for us," said Vince Tonc, MSE Technology Applications president.

MSE has over 29 years of demonstrated corporate environmental experience and is one of the larger engineering services and technology application firms in the Rocky Mountain region. MSE specializes in environmental planning and compliance services; waste management systems; operation and management of federal facilities; and technology deployment for agencies of the U.S. Government, public entities, and private sector. The Tetragenics acquisition complements and expands those services. (Visit

www.tetragenics.com for an expanded article on the whole story.)

Combining Tetragenics with MSE was a great fit for employees and especially for existing Tetragenics customers. Now, Tetragenics' automation and control experience, complemented by MSE's advanced technological development capabilities, allows us to offer our customers a much broader line of services than before (see the table below).

And customers have access to a host of other skill sets, expertise, technologies, and experienced professionals.

Now, more than any other time in our history, we are positioned to effectively offer our customers products, services, and systems to address entire facilities or single sites. Tetragenics, your control and monitoring company, just got better. ■

Tetragenics Now as Division of MSE offers ...

Secure software systems *plus* secure hardware components and advanced surveillance equipment.

Mechanical, software, electrical, instrumentation and control, and programming engineering services, *plus*, construction, civil/structural, process/chemical, biological, aerospace, environmental, remediation, geophysical, environmental, and mineral processing engineering services and economic cost analysis services.

31 years of SCADA project management *plus* 29 years of engineering experience, construction management experience, and turnkey experience. Over 56 years of experience working with customers.

Complete SCADA, Plant, and Communications systems *plus* advanced system integration using high tech, state-of-the-art equipment and technology in a variety of diverse systems and situations.

Advanced laboratory for factory testing *plus* 53-acre test facility site that meets all applicable environmental laws and regulations, and that contains a UL – Industrial Control Panel Shop.

Complete documentation and help systems *plus* two document control departments to work with you.

Turnkey solutions *plus* more options available for total turnkey solutions. MSE has the in-house resources to provide construction, mechanical, electrical, instrumentation and control (I&C), and other services. This can provide an even broader definition to turnkey on a project.

Dedicated engineers and staff *plus* over 200 qualified engineers, craftsman, scientists, drafters, and staff ready to provide exceptional service and provide you with new technology.

Visit our Web site at www.tetragenics.com for expanded articles and information.



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