PAUL GREGORY

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Paul Gregory, CEO of OleumTech Corp., talks with the Opportunist's *Managing Editor Leslie Stone about his company's wireless automation products.*

OleumTech is an Irvine, Calif.-based manufacturer of wireless systems that enable companies in the oil and gas, refining, petro-chemical, utilities and water/wastewater industries to monitor and control their operations remotely. Up until recently, companies would need to drive to various locations and manually monitor and inspect their operations. "I believe the paradigm shift in remote monitoring is the general acceptance that wireless telemetry is just as reliable as the hardwired automation solutions of the past," says Paul Gregory. "The last few years have seen prolific growth in the number, variety and reliability of low-powered sensors. The performance of low-power radios has also improved significantly over the last five years, setting the table for strong growth for remote wireless automation applications. We believe this trend is still in its early stages and will continue to grow at a fast pace over the next five to 10 years."

OleumTech is capitalizing on this shift to using wireless technologies in remote areas, says Gregory. "Our technology enables operators to save time and money right from that start and throughout the life cycle of a project," he explains. "Wireless implementation eliminates the cost of permitting, trenching, running conduit and wires and significantly reduces labor cost. It also helps save a tremendous amount of time since it only takes hours to deploy a wireless system rather than days or weeks to complete a traditional trench and cable installation. Also, the maintenance cost becomes minimal by just having to replace the battery every few years."

Opportunist: What is your background, Paul?

Paul Gregory: Before joining OleumTech I spent 22 years with Amoco Production Company, a major oil and gas producer. During that time I was a business analyst and worked closely with operations and developed a good understanding of upstream oil and gas. My experiences at Amoco provided me with a great foundation for running the day-to-day operations of a business like OleumTech.

Opportunist: So how did you become involved with OleumTech?

Paul Gregory: Through a mutual friend who had this idea that you could transfer the wireless technology used to manage automated meter readings in the utility industry to the oil and gas industry. Due to my connections, I was able to assist OleumTech engineers in procuring oil and gas locations where proof-of-concept products could be developed and tested on actual producing locations. I joined the company on a full-time basis in 2002, as VP of Business Development.

Opportunist: How was the technology initially received?

Paul Gregory: Back in 2000 when the idea was conceptualized there weren't lots of low-power radios and sensors available, but collecting data wirelessly rather than by digging trenches and laying cables was what you would call a 'sexy idea' to the industry. The original concept was based on the fact that there were all these so-called stripper wells out there that could benefit from this technology. We started out by collecting data from smart devices such as flow computers and compressor panels and moving that data to a central collection location. The company struggled at first to develop a commercially viable product but that was primarily due to technology restraints. By 2006 the founder, who was really more of an R&D kind of guy, stepped down and I accepted the position of CEO. Through the efforts of our chief operating officer and engineering staff, we were finally able to achieve our goal and transition the company from an R&D to a sales and service organization throughout 2007 and 2008.

Opportunist: Can you tell about some of your products?

Paul Gregory: Sure. We have two basic product groups. First is our low-power, intrinsically safe transmitters that power, collect and transmit data from the sensors in the field, and second is our receivers that collect data from the transmitters and, in some instances, other receivers and then hand the data off to the customer's host automation system. From the base design, OleumTech offers a variety of transmitters to monitor various process conditions including pressure, temperature, level, flow rate, on-off condition, etc. We offer two receivers depending on the I/O [input-output] requirements of the customer and the complexity of the application.

One of our flagship products is the magnetostrictive liquid level transmitter that can monitor product, interface and temperature levels in production tanks with .01-inch resolution. Our most popular liquid level package includes a transmitter equipped with a flexible sensor. This 'ultra-flexible sensor package' is tightly wound, which makes it easy for storage, shipping and installation in tanks up to 26 feet.

Our Analog pressure transmitter supports 3 analog inputs, which can be used connect up to three pressure sensors and one discrete input. So, rather than needing four separate transmitters for four sensors, this product can handle all four—making it

much more cost-effective. Other products include transmitters for temperature (RTD – resistance temperature detectors for more typical field operating conditions below 600 degrees Celsius and thermocouple, which is used for high temperature applications such as a flare stack), cathodic protection, flow and discrete.

Opportunist: What are the applications for your products?

Paul Gregory: OleumTech's products are used extensively in the 'digital oil field' to help our customers make sure that tanks are contained; pressures and temperatures are safely within tolerance and more. The digital oil field involves trying to capture data from deep down inside the drill hole all the way up to what's going on at the surface location, to monitor what is going on out in the field. Our strength is monitoring everything above ground. They are also used by our customers to assure that they—the customers—are in compliance with regulatory requirements for safety and monitoring. One of our newest applications for this technology is cathodic protection on the gathering system pipelines. It ensures that the pipe protection system is operating as it should and that it prevents corrosion. Our products also help to ensure our customers are in compliance with safety and monitoring.

Opportunist: In terms of benefits to the customer, what would you say are OleumTech's greatest strengths?

Paul Gregory: Our strength lies in the ability of our product offering and the variety of process conditions and applications those products can cover. We provide solutions that include simple monitoring for wellhead, pipeline or vessel pressures, temperatures and tank levels. We also provide more complex solutions such as wellhead controls and emergency shutdowns for high tank levels or other out-of-range conditions. The benefits of our products across all industries include reduced downtime, more efficient use of manpower, environmental protection from reduced spills and fast response to leaks, and increased production or throughput.

Our core niche is being able to monitor critical data in remote hazardous locations with battery powered, intrinsically safe wireless transmitters that are compatible with variety of third-party sensors.

Opportunist: Where do you get the inspiration for your products?

Paul Gregory: Our best new product ideas tend to come from our customers, so we've always worked very closely with them by carefully listening and understanding their needs. Once those needs are identified, then we work internally with our in-house engineering team to develop reliable, cost-effective solutions

Opportunist: We understand you recently announced the release of a Wireless Ultrasonic Liquid Level Sensor Transmitter. What is that and what does it do?

Paul Gregory: The Ultrasonic transmitter is a non-contact, cost-effective, liquid level solution used primarily for water and wastewater applications. In simple terms, the sensor measures the amount of fluid in a tank by bouncing a signal off the surface of the liquid and measuring the time it takes for the signal to return. The ultrasonic sensor has a range of up to 12 feet and the cost of this sensor is typically less than the magnetostrictive sensors utilized in oil and gas operations.

Opportunist: What are the features of the company's WIO® System and how does it work?

Paul Gregory: In a basic installation, the WIO System consists of several transmitters—transmitters include the sensor and a radio to transmit the data, by the way–and a receiver to collect data from the transmitters. For example, on a typical oil and gas location, transmitters would be installed to collect casing and tubing pressure from the wellhead, collect fluid levels from the oil and water tanks, provide readings from cathodic protection and detect if the compressor went down. This data is then transmitted to the receiver at a programmed interval, usually every five or 10 minutes. Once data reaches the receiver, it is then available to the customer's central control system. Features of our WIO system include an intrinsically safe, self-contained, battery powered, transmitter approved for use in hazardous locations. Intrinsically safe means the device is not capable of generating a spark that might ignite natural gas or other flammable or explosive substances. Our battery powered transmitters perform the dual role of providing power to an attached sensor and then transmitting that data to a receiver via a robust radio that operates on the 900 MHz or 2.4 GHz license-free ISM [industrial, scientific and medical] radio band. Transmitters have a range of up to 7,500 feet and can be purchased with or without a local display. A wireless gateway receiver can support up to 63 transmitters and additional transmitters can be added with expansion modules, creating a highly scalable system.

One of the key features of our system is the flexibility to use our transmitters with low-power sensors from a variety of manufacturers. This means that the customer can elect to purchase a turnkey solution from OleumTech or utilize a sensor that is specific to that customer's company or project. On the receiver end, we have developed integration packages with most major RTU [remote terminal unit] and flow computer products making installation and integration with the customer's existing automation system fast and simple.

Opportunist: How does OleumTech differentiate itself from the competition?

Paul Gregory: We have two key competitors and a number of smaller competitors fighting for share or trying to develop products that mimic our system. We differentiate in several ways, but the two key areas that set us apart are: First, we strive to have the broadest, most technologically reliable product line. And we continue to broaden our suite of products to handle any process condition our customers may encounter. We cannot be all things to every customer, but we understand our customers are looking for a complete system that will handle all their monitoring and control needs, not piecemeal solutions. Second, our WIO systems are 'vendor agnostic' to almost all low-power sensors and control systems used in upstream O&G. Some other manufacturers require the use of their own sensors with their wireless products but this limits flexibility since, in most retrofit applications, customers may already use existing sensors on their processes. Our customers appreciate the built-in flexibility of our systems to meet their needs with minimum planning and effort on their part.

Another way in which we differentiate ourselves is through our transmitters. They have the ability to reach a distance up to 7,500 feet over the air. Some competing products would need three or more transmitters to achieve the same range. What makes our system flexible is that it can be integrated into any existing SCADA, or supervisory control and data acquisition] systems. All the monitored data can be mapped into a Modbus table [the protocol for serial communications] so that an RTU or PLC [programmable logic controller] can easily access the data.

Opportunist: We understand that Oleum Tech was recently voted one of the best places to work in Orange County, Calif.

Paul Gregory: The most important thing we attempt to do as an organization is to make every employee feel that their contributions are important and valuable to the company. We have a truly open door policy and every employee is welcomed, and even expected, to share his or her ideas and opinions. This creates an atmosphere where employees feel they are part of the team and their ideas and performance matter. The other thing we do to create an atmosphere of teamwork is to share information with employees. Even though we are a privately held company, we share our financial performance with all employees on a regular basis and our bonus program is based on our financial performance as a company.

Opportunist: Are your clients based solely in the United States?

Paul Gregory: We have clients all over the United States, as well as in Canada and Mexico and some business in South America. We are in the process of getting the certifications necessary to do business in Europe and certain places in Asia and Australia as well.

Opportunist: What do you predict for the company during the next five years?

Paul Gregory: I believe the boom in low-power wireless sensors is just beginning. As new sensors are developed for different applications, I expect our business to continue to expand as well. Because we have developed a platform that will allow us to expand our product line to include many new applications, I expect OleumTech to continue to expand from its core customer base in oil and gas production into other industries. The other big goal for OleumTech is to expand our sales base from North America to a global presence. Now that we have obtained the necessary international regulatory approvals, we will begin a major push for international growth beginning in 2014.

I also predict that we will grow OleumTech through M&A activity or through strategic partnerships. This will allow us to grow beyond our current niche and provide more of a seamless end-to-end solution for major automation projects.

Because of our plans to aggressively expand our international business near-term and the potential for strategic acquisitions or investments in the future, finding the right investment partner for the future will be very important to our success.

Opportunist: Is an IPO in the company's future?

Paul Gregory: Because we have plans to aggressively expand the business internationally, we will be looking for funding of some type in the near future. For the last seven or eight years, we have been funded by friends and family and so we

will look for some type of liquidity event in the next two or three years in an effort to grow the company and provide liquidity for investors. Whether that is through going public or doing some type of buyout through a new investor remains to be seen, but we have done some of the groundwork and we have begun preparing a private placement memorandum.

Leslie Stone is an award-winning writer/editor with more than two decades of experience covering business, finance and lifestyle issues for newspapers, magazines and online publications. Originally from Virginia, she currently resides in Florida. Follow her on Twitter at @les7989.

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