

Wireless Seismic NEWS

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www.wirelesseismic.com

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RT System 2 integrates with SourceLink™ for High Productivity Vibroseis management support

The industry has seen significant growth in the density of source and receiver points in the large seismic surveys acquired in areas such as the Middle East and North Africa over recent years. In order to maximize productivity, techniques have been developed that massively increase the number of vibrators deployed on these surveys. This increase in vibrator numbers has been met with a commensurate increase in the number and complexity of radio communications between the recorder and the vibrators. Without proper management tools, there is significant potential for disruptive message collisions between “ready” and “Post Sweep Service” (PSS) messages from the vibrators and “start” messages from the recorder.

Seismic Source Company’s SourceLink™ software is a radio communication management tool which integrates with the company’s existing Universal Encoder II (UEII) hardware platform to initiate, fire, trigger, or monitor the vibrators and to pass these events to the recorder. Wireless Seismic has partnered with Seismic Source to integrate RT System 2 to SourceLink and UEII to give our users the capability of running complex Vibroseis techniques, such as Distance Separated Simultaneous Slip Sweep (DS⁴) or Independent Simultaneous Sweeps (ISS). The Source Queue Manager (SQM) is the window within RT System 2 where users can manage source points. In this integration, the SQM is controlled by the SourceLink software, running either on the client PC or on a separate Windows®-based machine. Great effort has been taken to ensure that there is only one place to enter parameters, eliminating the need to set duplicate parameters in two separate systems.

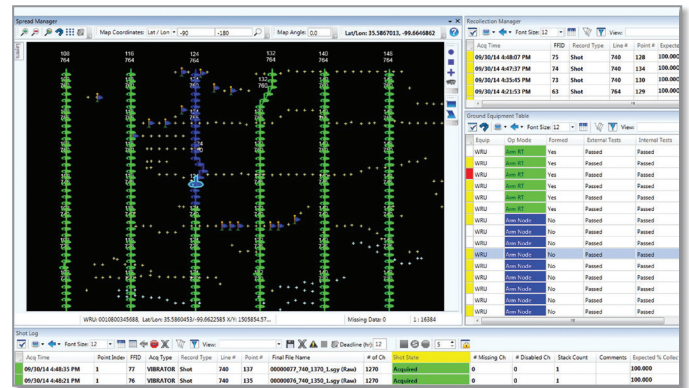
We will be demonstrating the seamless integration of the SourceLink software with RT System 2 during the EAGE in Madrid at Booth 500.

SourceLink is a trademark of Seismic Source Company. | Windows is a registered trademark of Microsoft Corporation.

RT System 2 features new Hybrid Radio Telemetry

RT System 2 now features a robust Hybrid Radio Telemetry system, so that if one or more WRUs lose their radio connectivity, these WRUs will immediately switch to operating in an autonomous mode. In this mode, these WRUs will seamlessly continue to record seismic data

into their large on-board flash memories, so no data is lost. When radio connectivity is restored to these WRUs, the buffered seismic data can be transmitted wirelessly to the Central recorder, at the operator’s convenience. With the availability of this major new Hybrid Radio Telemetry capability, any RT System 2 crew can continue to operate at its maximum efficiency and be confident that all of the expected seismic data is being safely recorded. Please ask us for more details or to see a demonstration during the EAGE in Madrid at Booth 500.



A screenshot of the RT System 2 Central shows WRUs in green collecting data in real time. The blue WRUs designate lost radio connectivity while continuing to record and store data to flash memory. Production continues with no data loss.

Oil Search Limited concludes Seismic Acquisition Survey in Kurdistan using RT System 2

Oil Search Limited and Asian Oilfield Services completed a 636 sq km 3D seismic survey in December 2014, following seven months of continuous operations over the extremely rugged terrain of the Taza Block in the Kurdistan Region of Iraq using the RT System 2. The acquisition project set a new world record for the number of seismic channels transmitted cable-free in real time by deploying over 13,000 channels with an active recording patch of 6,400 channels.

“We are very impressed with the reduced HSE exposure and other benefits that eliminating cables has delivered without compromising the data quality,” stated Nigel Wilson, General Manager of Exploration, Oil Search. “I am pleased to be able to report that we completed the survey safely.”

“The scalability of the RT System 2 became truly apparent as the crew deployed 13,000 channels across a large area of hilly terrain. Another major benefit from the elimination of cables was the reduced interference by farmers as they recommenced work in their fields in October, after the onset of the first rains,” explained Wilson. “The real-time QC and noise monitoring was especially useful, allowing us to continuously monitor the status of the spread despite significant noise bursts from cultural and other activities inside and outside the survey area from time to time.”



Kurdistan farmers can easily plow around the wireless remote units of the RT System 2.

Taking a Walk on the Wild Side: A Nature-Loving Doodlebugger's Perspective

By Will Fox, WSI Field Service Engineer

For as long as I can remember, I have been fascinated by wildlife. Trips to the zoo, the park, or wildlife television have always captivated my attention, which eventually led to me studying wildlife biology at Texas State University. I also had an urge to travel to adventurous places, and joining Wireless Seismic (WSI) as a field service engineer has given me the opportunity to pursue my dream of being a world traveler.



My first foreign trip was to the Indonesian island of Sumatra, home to some of the planet's rarest and most exotic animals. The drive from the camp to the prospect was along dangerous roads with beautiful views of the Sumatran landscape, and I got my first taste of Sumatran wildlife—rare birds, monkeys, and a fleeting glimpse of a huge monitor lizard that I had so hoped to see!

On the project, I experienced how the RT System 2 limits damage to the environment. The receiver lines of the survey crossed many small streams, and the banks of these streams surely would have been damaged if a cable system had been deployed. Without due care, enough damage could have occurred to stop the flow of these streams or interfere with the movement of wildlife in the body of water. RT System 2 minimized damage to the habitat by reducing the access requirements in these vulnerable areas. We also worked in areas with high forest canopy where an abundance of wildlife lived, including birds and monkeys. The small footprint and relatively subdued colors of the RT System 2 limited the disturbance to this wildlife and minimized the introduction of unnatural items into their environment.

My next assignment was to Northern Alaska near Dead Horse in mid-winter! Polar bears were my first thought of what I hoped to see. Unfortunately, we were too far from the sea ice, so I had to settle for foxes and rabbits, which were still enjoyable. Visiting the tundra showed me some of the other benefits of RT System 2. Deploying the system is very easy, and it does not require large vehicles because the boxes are compact. This quick and simple deployment limits the time workers spend on the tundra, reducing both the risk of damaging its fragile soil and the exposure of workers to this harsh environment. The tundra is one of the most fragile habitats on Earth; once the vegetation is damaged, it may take hundreds of years to recover, if at all. Limiting access requirements of workers and the quantity of equipment is best way to protect it.

I have spent most of my time with WSI in southern Kurdistan, close to the Iranian border. In the sweltering heat of summer, there is little wildlife to see; however, there are some interesting reptiles—mostly lizards. I enjoyed watching reptiles of all sizes scampering around the rocky Kurdish desert, and I was even lucky enough to catch a few.

Land seismic work takes place all over the world in varied habitats, from the Alaskan tundra and Russian taiga, to the jungles of Colombia and Indonesia. As an industry, we have an obligation to protect these habitats from damage and destruction as we perform our work. We are not always able to leave the habitat untouched, but we can minimize the damage done.

Deployment of traditional systems has many unintended consequences, from soil and vegetation destruction to impedance of smaller forms of life. The RT System 2 field units are far less detrimental to the environment. The surface area they cover is minimal, and there is minimal damage to vegetation and soil between receiver points.

I consider myself fortunate to have traveled with WSI, as I have seen places and environments I would never have otherwise seen.

WSI welcomes Bob Bacon as Senior Vice President, Sales and Marketing

Bob Bacon joins Wireless Seismic as senior vice president, sales and marketing. Bob brings with him 35+ years of experience in a variety of direct sales, sales management, marketing and senior management roles both within the seismic industry and in other industries. Previously, he served as the global accounts manager at MicroSeismic, Inc. He has also been involved with several seismic-related ventures over the years, most notably with Digicon Geophysical, Landmark Graphics, and 3DX Technologies. Bob is a graduate of the University of Texas with a B.S. in Advertising with minor studies in marketing and Asian culture.



Visit Wireless Seismic at EAGE Madrid 1-4 June | Stand 500

Stop by for a demonstration of the RT System 2 real-time and cable-free seismic data acquisition system with Hybrid Radio Telemetry.

Eliminates:

- complex data harvesters
- large & expensive transcription trailers
- additional computer hardware
- additional skilled field technicians
- "last patch" effect
- waiting for data collection & transcription
- delayed decision making



RT System 2 delivers uninterrupted seismic crew productivity, even if radio connectivity on the spread is partially lost, while keeping your data safe.

Choose the battery to meet your needs

RT System 2 is designed to minimize the number of trips to the receiver spread, reducing HSE exposure and disturbance. Its low power consumption means that the high-energy density of the standard batteries will last for the duty cycle of most conventional 2D and 3D surveys—up to 25 days*. Some applications require a longer duty cycle, so users may choose higher capacity batteries which will last up to 40 days*. We will be happy to recommend the most appropriate battery option for your RT System 2 needs.



Standard Battery

- Up to 25 days deployment
- Sufficient for most 2D and 3D surveys
- 8-hour recharge time from fully discharged battery



High-Capacity Battery

- Up to 40 days deployment
- Ideal for long duration deployments, such as passive monitoring
- 12-hour recharge time from fully discharged battery

* Assumes a 12-hour workday.
For 24-hour operations, the duty cycle will be approximately half.