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Mobile video system visually connects global plant floor engineers

Manufacturers who want to see with their own eyes what's going on in remote locations can use the Onsight mobile collaboration solution from Librestream Technologies.

By Renee Robbins

Manufacturers who want to see with their own eyes what's going on in far-flung plants or remote locations now have a mobile collaboration solution that provides true plant floor visibility. Technology from Librestream Technologies Inc. of Winnipeg, Canada, is allowing engineers to train and mentor operators in Mexico, and collaborate with outsourced manufacturing partners in Asia.

When the H1N1 (swine flu) virus hit Mexico this spring and travel restrictions to the country were advised, one multinational manufacturer needed another way to collaborate with engineers and operators in its Mexican plant. This is the first purchase of the Onsight system in direct response to the H1N1 outbreak, according to Librestream CEO Kerry Thatcher. "One of the key benefits of Onsight has always been its ability to dramatically reduce travel; however, this purchase was the first one driven entirely by a moratorium on travel due to a pandemic," he says.

Librestream's patented Onsight solution extends traditional video conferencing and collaboration services to connect workers at any location and at any time. Using 802.11 b/g wireless networking device combined



with desktop software, it provides live video, two-way audio, and two-way telestration, which is freehand sketching over a motion picture image, as commonly seen on broadcast television during football commentaries and weather reports. Outside of manufacturing, the Onsight system is also used for automotive collision repair and telemedicine applications.

For this manufacturer, the Onsight system will be used to remotely train

and mentor manufacturing staff in Mexico, monitor manufacturing processes, and inspect product quality from Canada. The staff in Mexico will stream live video to specialists in Canada while talking and sharing media to facilitate their work together remotely. The solution includes the Onsight 1000 mobile device for the manufacturing plant, and multiple copies of Onsight Expert software for the desktops of specialists who reside

in Canada. Online training will also be provided for both the device operators in Mexico and experts in Canada to speed implementation.

“Multinational companies usually invest in Onsight to save money and improve productivity, but risk mitigation is a growing area of importance,” says Thacher.

The handheld Onsight mobile device comes in three models, including the Onsight 2000EX, which recently gained Zone 2 hazardous location approval for IECEx, ATEX, NEC and CEC. The Zone 2 certification adds to the North America Class I, Division 2 rating that was first announced for the Onsight 2000Ex in early 2009. These ratings mean the device can be used in potentially hazardous locations such as oil and gas, chemical processing plants, aircraft hangars, and gas pipelines in Europe and North America. According to Thacher, Librestream has already shipped a large order of Onsight 2000Ex Zone 2 devices to a major partner that has projects underway with some of the world’s leading energy companies.

In March 2009, Librestream announced that Western Glove had purchased the Onsight mobile collaboration system to enhance communication between its head office in Canada and its outsourced manufacturing partners in China and Hong Kong. The tool enables plant floor and management personnel to engage in live collaboration sessions or play record-

ed files from their manufacturing partners in Asia to review samples, provide feedback, or resolve problems as they occur. Western Glove designs high fashion denim products for its own Silver Jeans brand, as well as for celebrity brands that are manufactured in Asia and Mexico and sold worldwide.

“When we outsourced the manufacturing of our denim products in 2003, new challenges emerged” says Michael Silver, principal of Western Glove and president of Silver Jeans. “We spent a lot of time on airplanes making sure that quality standards were met, and resolving production issues with our partners. To reduce this costly travel, we tried sharing digital pictures, but they didn’t do the job. With Onsight, we can reduce our travel costs and, more importantly, save valuable production time.”

Wei Deng, Librestream’s director of channels and business development for Asia-Pacific, visited the Frontline Clothing Ltd. office in Hong Kong and factories in Jiangmen, China when Onsight was first put into operation for Western Glove. “The team at Frontline was very pleased with the quality of the video and the images from Onsight. They could see the very fine details of the fabric and even the color pattern of jet-washed jeans.”

In many areas where the Onsight mobile collaboration system is used, WiFi networks are readily available to stream video and audio from the Onsight mobile device. However, to

Features of the Onsight mobility devices

- Hand-held wireless mobility with integrated 802.11 b/g wireless networking
- Real time, high quality video streaming to the Onsight Expert desktop
- 2-way VOIP audio calls with options to use speakerphone and headset modes
- 2-way onscreen drawing/telestration ability
- Superior quality close-ups from 10x zoom and 1 cm macro zoom features
- High resolution viewfinder with touch screen support
- Bi-directional video recording and still image capture for record keeping
- Advanced security, encryption and authentication features
- Ability to make video / audio calls to SIP enabled video conferencing endpoints
- Image sharing mode to manage low bandwidth network connections

optimize performance, factors such as channel selection, interference sources, signal coverage and others must be taken into account. Librestream addresses these issues in a white paper, *Wireless Network Considerations for Mobile Collaboration*. ■