



*Saving underground miners' lives with technology.*

Wherever there is an  
InSeT System Installed...

**There is hope!**



Radio Relay



Enclosed Relay



Inertial Sensor

"Our goal is to greatly improve the chances that underground miners can go home to their families every day when their work is done."

#### **DID YOU KNOW?**

- The InSeT Systems Tracking & Communications system provides the most accurate location data in real time.
- The system provides accurate tracking of equipment and supplies to generate operational savings to pay for the system.
- The system meets or exceeds all of the requirements of the MINER Act of 2006.
- The pilot system will be installed later this summer.
- Commercial systems will be available by the end of 2009.

#### **RECENT HIGHLIGHTS**

- Loan approved from Ohio Department of Development to support commercialization of system.
- Blast shield dome design submitted to MSHA for XP Approval.
- Draper Labs agrees to develop software for inertial tracker.
- Century Mine agrees to be the pilot test site for InSeT Systems.
- YOU CAN SPECIFY THE InSeT Systems INERTIAL SENSOR TRACKING SYSTEM IN YOUR ERP.

Contact InSeT Systems for more detailed information:

**InSeT Systems LLC**

526 S. Main St., Ste. 710B, Akron, OH 44311-1848

1-330-434-0202 • Fax: 330-434-0322

**[www.InSeTSystems.com](http://www.InSeTSystems.com)**



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## Emergency Response Plans due by June 15, 2009

New or revised ERPs must be submitted to MSHA by June 15, 2009. These ERPs must designate how the mine will comply with the requirements of the MINER Act of 2006. Included in the items to be detailed in the ERP is what tracking and communication system the mine intends to install to meet the requirements of the Act. Public Policy Letter P09-V-01 issued by MSHA on January 16, 2009, requires a communication and tracking system that provides location data of underground miners within 200 feet of their actual location.

The system must also include redundant communications for location data and voice or text between the miner and the surface.

A clarification memo posted on the MSHA website April 29, 2009, says, in response to the following question:

***“Can a mine operator submit a revised ERP by June 15, 2009, which includes a communication and tracking system that is not MSHA approved?”***

***Yes, provided that the system is approved and installed within a reasonable time.”***

InSeT System’s Inertial Sensor Tracking and Communication system will meet these requirements. Testing to date of the prototype system has shown accuracy well within the 200-foot limit.

In fact, the target accuracy of 25-50 feet appears to be very achievable. For detailed information on the InSeT Systems Inertial Sensor Tracking and Communication system, see our website at [www.insetsystems.com](http://www.insetsystems.com) or call 330-434-0202.

## Century Mine to host Pilot system installation

InSeT Systems has received confirmation that American Energy will allow the pilot system to be installed and tested at Century Mine in southeastern Ohio. This installation should occur by late summer. It will include a number of tracker units and a wireless mesh network installed on the clean air side of the mine to allow verification of the system operation and accuracy prior to submitting hardware for MSHA approval.

InSeT has already submitted the paperwork for the explosion proof blast shield to MSHA. The paperwork for the inertial tracking units will be submitted in June.



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### **C. S. Draper Labs will develop Inertial Tracking Software**

InSeT has reached an agreement with C. S. Draper Labs, Cambridge, MA to have Draper Labs develop and refine the tracking software for the pilot and commercial systems. Draper Labs is the pre-eminent authority in the world on inertial navigation systems and InSeT Systems is very pleased to be teamed with Draper on this development activity. Preliminary underground tests indicate the system accuracy goal of 25 feet is very attainable.



### **InSeT Systems, LLC is approved for Innovation Ohio Fund loan**

InSeT has received an Innovation Ohio Fund loan for nearly \$800K to fund the development and deployment of their Inertial Sensor Tracking and Communication system. In approving the loan, the Ohio Department of Development is supporting their commitment to coal as an on-going source of energy for Ohio and the nation. With the state's commitment to clean coal, they also understand that clean coal must be safe coal.

Another department of the State of Ohio is considering an additional investment in InSeT Systems, LLC to take the company's system to full commercial applications.

## **Mine Owners can now specify the most accurate tracking system available**

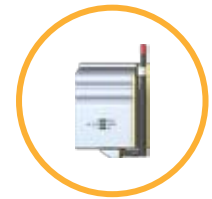
If a mine owner wants the most accurate tracking system as well as significant operational improvements that will help pay for the system, consider the InSeT Systems Inertial Sensor Tracking and Communication system. The Inertial Sensor Tracking and Communication system will track miners, equipment, and supplies to an accuracy of 25-50 feet and in real time. This is not a "zone based" system that signals that a miner passed a point a few minutes ago and hasn't passed another access point. It tracks personnel and assets full time in real time. And the wireless mesh network, using 900 MHz radio relays protected by explosion proof blast shields, provides the best chance of continued communication and tracking after an underground accident.



Radio Relay



Enclosed Relay



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If you want the best system currently being developed for underground mines, learn more about the Inertial Sensor Tracking and Communication system, and then specify the best in your ERP.

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