

# NIOSH Communications and Tracking Workshop

Charleston, West Virginia  
May 19 and 20, 2009

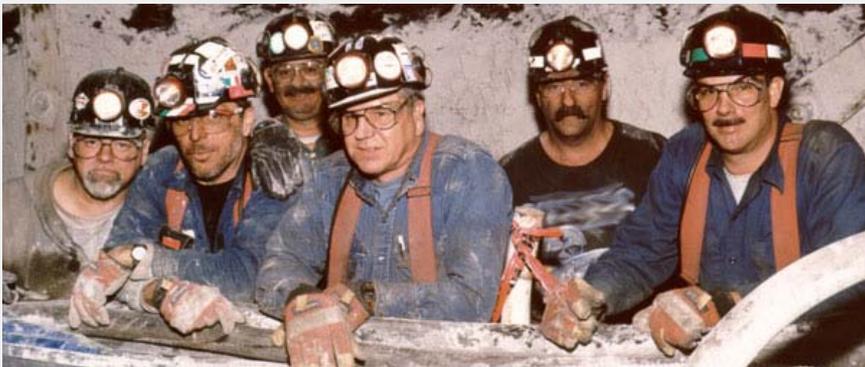
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**Office of  
Mine Safety and  
Health Research**



# NIOSH Mission

To Improve Mineworker  
Health and Safety Through  
Research and Prevention



Department of Health and  
Human Services (HHS)



Centers for Disease Control  
and Prevention (CDC)



National Institute for Occupational  
Safety and Health (NIOSH)



Office of Mine Safety and  
Health Research (OMSH)

## Pittsburgh Research Lab



## Lake Lynn Research Lab



## Spokane Research Lab



# MINER Act – June 15, 2006

- **Mine Operator – Submit a plan for approval within three years of the MINER Act that provides:**
  - *Post-accident communications between underground and surface personnel via a wireless two-way medium*
  - *An electronic tracking system permitting surface personnel to determine the location of any persons trapped underground*
- **NIOSH – Permanently establish an Office of Mine Safety and Health with a charge to:**
  - *Develop new mine safety technology and technological applications*
  - *Expedite the commercial availability and implementation of such technology in mining environments*

# Incredible Strides over Last Three Years

- **Where were we in 2006?**

- No wireless post-accident communications and tracking systems were commercially available and MSHA-approved
- Mine communications research effectively ended in the 1980s



- **Where are we now?**

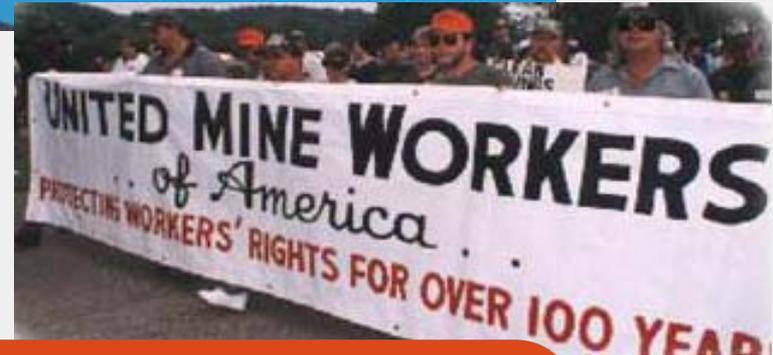
- A variety of technologies are available for achieving the requirements of the MINER Act
- Numerous manufacturers of communications and tracking systems



# How was this achieved?

## Communications Partnership Involving:

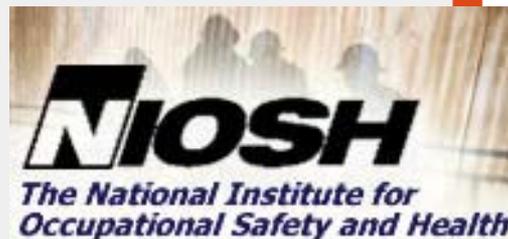
- Industry
- Labor
- Government Agencies



Commonwealth of Pennsylvania



Department of  
Environmental Protection



United States Department of Labor

**MSHA**

Mine Safety and Health Administration

# Reality Check

- Uncharted territory
- Do not have all the answers
- Some questions will only be answered once systems are installed
- Learning curve for all of us



# **New Challenges, New Opportunities**

- **Will provide a huge step in mine safety.**
- **Will improve safety for routine operations, not just catastrophic events.**
- **Will provide the infrastructure for improved mine monitoring.**



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# DRAFT

Tutorial on  
*Wireless  
Communications  
& Electronic  
Tracking*



## Tutorial

- CD with Tutorial can be picked up at registration desk after turning in survey
- Has not been externally peer reviewed
- Working draft
- Comments are welcome



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Health Research

Tutorial on  
*Wireless  
Communications  
& Electronic  
Tracking*



# Today's Workshop

- How Communications and Tracking Systems Work
- Available Technologies
- Installation and Operation Considerations
- Meet Manufacturers

# Disclaimer

The findings and conclusions in this presentation have not been formally disseminated by the National Institute for Occupational Safety and Health and should not be construed to represent any agency determination or policy.

Mention of company names or products does not constitute endorsement by the National Institute for Occupational Safety and Health



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# Thank you!

