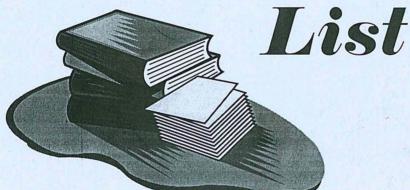


5

# Mining Publications

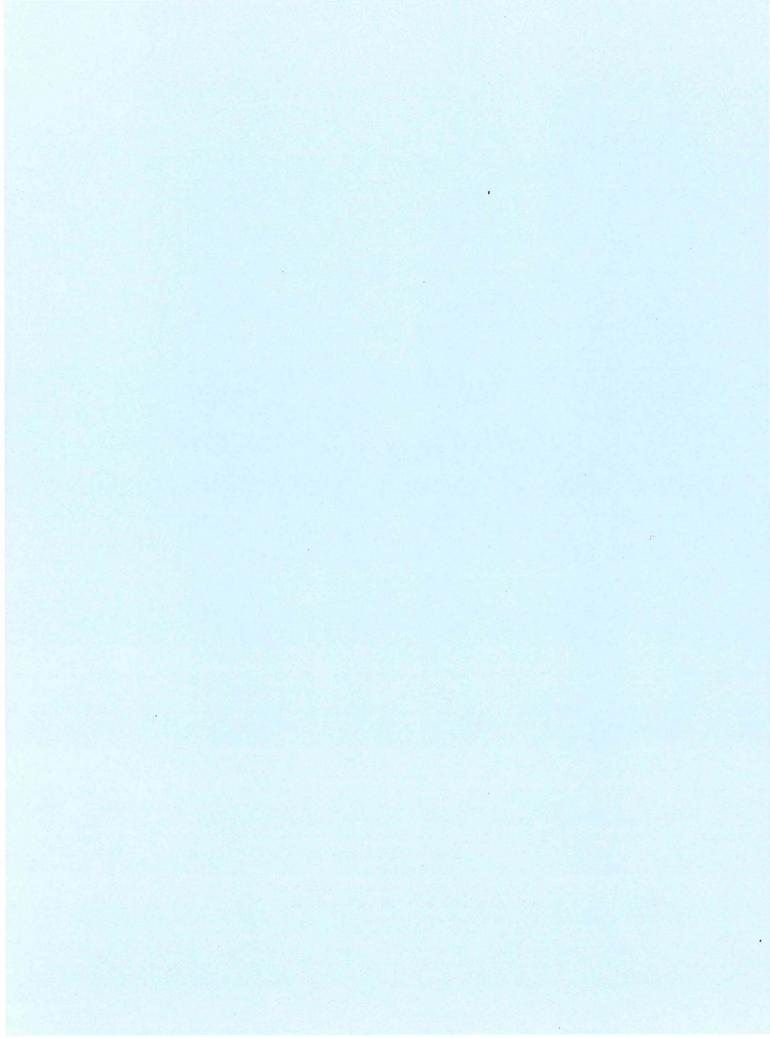


# 1995 - 1998



U.S. Department of Health and Human Services Public Health Service Centers for Disease Control and Prevention National Institute for Occupational Safety and Health







# **MINING PUBLICATION LIST**

1995 - 1998

R. Larry Grayson Associate Director Office of Mine Safety and Health Research National Institute for Occupational Safety and Health

To receive other information about occupational safety and health problems, call 1-800-35-NIOSH (1-800-356-4674), or visit the NIOSH Home Page on the World Wide Web at http://www.cdc.gov/niosh

### DHHS (NIOSH) Publication No. 99-102

## TABLE OF CONTENTS

ine Safety and Health	
Reports of Investigations	2
Information Circulars	4
Technology News	
Special Publications	6
Dissertations	7
Mining Health and Safety Update	
Flyers	7
Hazard Identification	7
Outside Papers	7
NIOSH Numbered Publications	24



#### MINE SAFETY AND HEALTH

**Reports of Investigations** (RIs) present the results of original mining health and safety research. They describe individual, short-term studies and include the objective of the research, the materials and techniques used, and the results of tests or experiments.

**Information Circulars** (ICs) present information compiled and analyzed by mining health and safety researchers. They include historical and statistical data, surveys of mining and operating activities, computer program descriptions and user guides, and annotated bibliographies.

**Technology News** is a one-page flyer used to announce a milestone in mining health and safety research, technology ready for transfer to industry, or an opportunity for cooperative research and development.

Mining Health and Safety Update is a newsletter issued periodically on different topics to apprise readers of tangible research results and to expedite the transfer of new technologies to customers. Each section describes what is new or changed in relation to current practices or technologies in mines today.

NIOSH Numbered Publications are generated internally, by contract, or by an interagency agreement. Publications in this category include Criteria Documents (CD), alerts, Current Intelligence Bulletins (CIB), Health and Safety Guides (HSG), symposium or conference proceedings, NIOSH administrative and management reports, scientific investigations, data compilations, and worker-related booklets.

#### MINE SAFETY AND HEALTH

#### **Reports of Investigations (RI's)**

Barrett EA, Kowalski KM [1995]. Effective hazard recognition training using a latent-image, three-dimensional slide simulation exercise. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, RI 9527. NTIS stock number: PB95-170379.

Beus MJ, Orr TJ [1995]. Computer modeling and analysis of the Greens Creek Mine, Admiralty Island, AK. Spokane, WA: U.S. Department of the Interior, Bureau of Mines, RI 9530. NTIS stock number: PB95-176418.

Pariseau WG, Johnson JC, McDonald MM, Poad ME [1995]. Rock mechanics study of shaft stability and pillar mining, Homestake Mine, Lead, SD (in three parts): 1. Premining geomechanical modeling using UTAH2. Spokane, WA: U.S. Department of the Interior, Bureau of Mines, RI 9531. NTIS stock number: PB95-178927.

Whyatt JK, Beus MJ [1995]. In situ stress at the Lucky Friday Mine (in four parts): 1. Reanalysis of overcore measurements from 4250 level. Spokane, WA: U.S. Department of the Interior, Bureau of Mines, RI 9532. NTIS stock number: PB95-179859.

Oyler DC [1995]. A case study of shield-strata interaction at a southern Ohio mine. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, RI 9534. NTIS stock number: PB95-178901.

Smith AC, Pro RW, Lazzara CP [1995]. Performance of automatic sprinkler systems for extinguishing incipient and propagating conveyor belt fires under ventilated conditions. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, RI 9538. NTIS stock number: PB95-200879.

Yenchek MR, Schuster KC, Hudson AJ [1995]. Operational characteristics of trailing cable splices. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, RI 9540. NTIS stock number: PB95-209227.

Ruff TM [1995]. Teleoperation of a compact loader-trammer. Spokane, WA: U.S. Department of the Interior, Bureau of Mines, RI 9545. NTIS stock number: PB95-216305.

Wang RC, Shapiro DE [1995]. Bending fatigue tests on flattened strand wire rope at high working loads. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, RI 9547. NTIS stock number: PB95-216297.

Colinet JF, Spencer ER [1995]. Dust sources and controls for multiple-machine longwall faces. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, RI 9548. NTIS stock number: PB95-220141.

Edwards JC, Morrow GS [1995]. Development of coal combustion sensitivity test for smoke detectors. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, RI 9551. NTIS stock number: PB95-219648.

Timko RJ, Derick RL [1995]. Detection and control of spontaneous heating in coal mine pillars—a case study. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, RI 9553. NTIS stock number: PB95-236790.

Dubaniewicz TH Jr., Chilton JE [1995]. Optically powered remote gas monitor. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, RI 9558. NTIS stock number: PB95-236808.

Whyatt JK, Jenkins FM, Larson MK [1995]. In situ stress at the Lucky Friday Mine (in four parts): 2. Analysis of overcore measurement from 5300 level. Spokane, WA: U.S. Department of the Interior, Bureau of Mines, RI 9560. NTIS stock number PB95-251880.

Tesarik DR, Seymour JB, Yanske TR, McKibbin RW [1995]. Stability analysis of a backfilled room-and-pillar mine. Spokane, WA: U.S. Department of the Interior, Bureau of Mines, RI 9565. NTIS stock number: PB95-251872.

Peterson JS [1995]. Influence of environmental factors on spark ignition probability. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, RI 9566. NTIS stock number: PB95-269800.

Whyatt JK, Beus MJ, Larson MK [1995]. In situ stress at the Lucky Friday Mine (in four parts): 3. Reanalysis of overcore measurements from the Star Mine. Spokane, WA: U.S. Department of the Interior, Bureau of Mines, RI 9567. NTIS stock number PB95-271276.

Turin FC et al. [1995]. Human factors analysis of roof bolting hazards in underground coal mines. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, RI 9568. NTIS stock number: PB95-274411.

Perzak FJ, Litton CD, Mura KE, Lazzara CP [1995]. Hazards of conveyor belt fires. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, RI 9570. NTIS stock number: PB95-264792.

Conti RS, Litton CD [1995]. A comparison of mine fire sensors. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, RI 9572. NTIS stock number: PB96-115233.

Clark CC, Vickery JD, Backer RR [1995]. Transport of total tailings paste backfill: results of full-scale pipe test loop pumping tests. Spokane, WA: U.S. Department of the Interior, Bureau of Mines, RI 9573. NTIS stock number: PB96-118898.

Pariseau WG, Johnson JC, McDonald MM, Poad ME [1995]. Rock mechanics study of shaft stability and pillar mining, Homestake Mine, Lead, SD (in three parts): 2. Mine measurements and confirmation of premining results. Spokane, WA: U.S. Department of the Interior, Bureau of Mines, RI 9576. NTIS stock number: PB96-107081.

Whyatt JK, Williams TJ, Blake W [1995]. In situ stress at the Lucky Friday Mine (in four parts): 4. Characterization of mine in situ stress field. Spokane, WA: U.S. Department of the Interior, Bureau of Mines, RI 9582. NTIS stock number PB96-131685.

Vaught C, Fotta B, Wiehagen WJ, Conti RS, Fowkes RS [1996]. A profile of workers' experience and preparedness in responding to underground mine fires. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, RI 9584. NTIS stock number: PB96-147848.

Miron Y [1995]. Gel sealants for the mitigation of spontaneous heatings in coal mines. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, RI 9585. NTIS stock number: PB96-131966.

Edwards JC, Morrow GS [1995]. Evaluation of smoke detectors for mining use. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, RI 9586. NTIS stock number: PB96-128566.

DuCarme JP, Jaspal JS, Kwitowski AJ [1996]. New techniques for mining thin-seam mountaintop coal reserves. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, RI 9595. NTIS stock number: PB96-147863.

Cecala AB, Timko RJ, Prokop AE [1995]. Reducing respirable dust levels during bag conveying and stacking using bag and belt cleaner device. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, RI 9596. NTIS stock number: PB96-135470.

Beus MJ, Orr TJ, Whyatt JK [1996]. Application of field measurements and computer modeling to evaluate deep

mine shaft stability in northern Idaho. Spokane, WA: U.S. Department of the Interior, Bureau of Mines, RI 9600. NTIS stock number: PB96-140181.

Orr TJ, Beus MJ [1996]. Real-time monitoring of field measurements for mine design: Greens Creek Mine, Admiralty Island, Alaska. Spokane, WA: U.S. Department of the Interior, Bureau of Mines, RI 9613. NTIS stock number: PB96-144183.

Weiss ES, Conti RS, Bazala EM, Pro RW [1996]. Inflatable devices for use in combating underground mine fires. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, RI 9614. NTIS stock number: PB96-162367.

Colinet JF, Jankowski RA [1996]. Dust control considerations for deep-cut mining when utilizing exhaust ventilation and a scrubber. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, RI 9615. NTIS stock number: PB96-147798.

Organiscak JA, Page SJ [1996]. Assessment of airborne dust generated from small truck-mounted rock drills. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, RI 9616. NTIS stock number: PB96-155098.

Pariseau WG, Johnson JC, McDonald MM, Poad ME [1996]. Rock mechanics study of shaft stability and pillar mining, Homestake Mine, Lead, SD (in three parts): 3. Geomechanical monitoring and modeling using UTAH3. Spokane, WA: U.S. Department of the Interior, Bureau of Mines, RI 9618. NTIS stock number: PB96-144217.

Whyatt JK, White BG, Johnson JC [1996]. Strength and deformation properties of belt strata, Coeur d'Alene mining district, ID. Spokane, WA: U.S. Department of the Interior, Bureau of Mines, RI 9619. NTIS stock number PB96-159009.

K<sub>3</sub>Tiazi N [1996] Performance comparison of secondgeneration oxygen self-rescuers. Pittsburgh, PA: U.S. Department of Energy, RI 9621. NTIS stock number: PB96-188107.

Edwards JC, Friel GF [1996]. Comparative in-mine evaluation of carbon monoxide and smoke detectors. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, RI 9622. NTIS stock number: PB96-165188.

Spencer ER, Kovscek PD, Fields KG [1996]. Design and demonstration of a continuous dust control parameter monitoring system. Pittsburgh, PA: U.S. Department of Energy, RI 9623. NTIS stock number: PB96-188156. Friel GF, Edwards JC [1996]. Mine fire detection by ultrasonic ranging systems. Pittsburgh, PA: U.S. Department of Energy, RI 9624. NTIS stock number: PB96-188149.

Molinda GM, Monaghan WD, Mowrey GL, Persetic GF [1996]. Using ground penetrating radar for roof hazard detection in underground mines. Pittsburgh, PA: U.S. Department of Energy, RI 9625. NTIS stock number: PB96-188123.

De Rosa MI [1996]. A 20-liter furnace test method to determine the combustion gas toxicity of conveyor belts. Pittsburgh, PA: U.S. Department of Energy, RI 9626. NTIS stock number: PB96-202619.

Goodman GVR, Spencer ER [1996]. Evaluation of techniques for protecting dust sampling equipment in harsh environments. Pittsburgh, PA: U.S. Department of Energy, RI 9627. NTIS stock number: PB96-210810.

Lucci CE [1996]. Moisture-corrected reflectance rock dust meter. Pittsburgh, PA: U.S. Department of Energy, RI 9630. NTIS stock number: PB96-215017.

Weiss ES, Cashdollar KL, Sapko MJ, Bazala EM [1996]. Secondary explosion hazards during blasting in oil shale and sulfide ore mines. Pittsburgh, PA: U.S. Department of Energy, RI 9632. NTIS stock number: PB97-127658.

Weiss ES, Slivensky WA, Schultz MJ, Stephan CR. Jackson KW [1996]. Evaluation of polymer construction material and water trap designs for underground coal mine seals. Pittsburgh, PA: U.S. Department of Energy, RI 9634. NTIS stock number: PB96-123392.

Kyriazi N, Shubilla JP [1996]. Self-contained self-rescuer field evaluation: fifth-phase results. Pittsburgh, PA: U.S. Department of Energy, RI 9635. NTIS stock number: PB97-124937.

Tesarik DR, S., mour JB, Lane WL [1996]. Material properties of retested specimens composed of tailings, cement, and blast-furnace slag. Spokane, WA: U.S. Department of Energy, RI 9636. NTIS stock number: PB97-133276.

Beus MJ, Ruff TM [1997]. Development of a mine hoist and ore pass research facility. Spokane, WA: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, DHHS (NIOSH) Publication No. 97-134, RI 9637.

Yenchek MR, Cawley JC, Peterson JS, Kohler JL [1997]. Distinguishing motor starts from short circuits through phase-angle measurements. Pittsburgh, PA: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, DHHS (NIOSH) Publication No. 97-120, RI 9638.

Peterson JS, Cole GP [1997]. Detection of downed trolley lines using arc signature analysis. Pittsburgh, PA: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, DHHS (NIOSH) Publication No. 97-123, RI 9639.

Franks RA, Opferman JJ, Friel GF, Edwards JC [1997]. A second-generation remote optical methanometer. Pittsburgh, PA: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, DHHS (NIOSH) Publication No. 97-126, RI 9640.

Conti RS, Yewen RG [1997]. Evaluation of a signaling and warning system for underground mines. Pittsburgh, PA: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, DHHS (NIOSH) Publication No. 97-127, RI 9641.

Schiffbauer WH [1997]. Accurate navigation and control of continuous mining machines for coal mining. Pittsburgh, PA: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, DHHS (NIOSH) Publication No. 98-101, RI 9642.

Cortese RA, Perlee HE [1998]. Full-scale testing of the float dust deposition meter. Pittsburgh, PA: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, DHHS (NIOSH) Publication No. 98-139, RI 9643.

Wang RC, Miscoe AJ, McKewan WM [1998]. Model for the structure of round-strand wire ropes. Pittsburgh, PA: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, DHHS (NIOSH) Publication No. 98-148, RI 9644.

#### Information Circulars (IC's)

Ambrose DH [1995]. Computer graphics simulations comparing reduced exposure mining equipment—shuttle cars versus continuous haulage systems. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, IC 9418. NTIS stock number: PB95-170643.

Perdue CW, Kowalski KM, Barrett EA [1995]. Hazard recognition in mining: a psychological perspective. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, IC 9422. NTIS stock number: PB95-220844.

Rethi LL, Burns KL [1995]. Comparison of small mines and small businesses: health and safety barriers and intervention strategies. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, IC 9423. NTIS stock number: PB95-181376.

Maksimovic SD, Mowrey GL [1995]. Evaluation of several natural gamma radiation systems—a preliminary study. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, IC 9434. NTIS stock number: PB96-128608.

Kissell FN [1995]. How to control air contaminants during tunnel construction. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, IC 9439. NTIS stock number: PB96-147558.

Dobroski H Jr., Stephan CR, Conti RS [1996]. Historical summary of coal mine explosions in the United States, 1981 to 1994. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, IC 9440. NTIS stock number: PB96-154687.

Martin LA, Girard JM, Goris JM [1996]. Installation and safety practices for cable bolts in underground mines. Spokane, WA: U.S. Department of the Interior, Bureau of Mines, IC 9441. NTIS stock number: PB96-140165.

Molinda GM, Mark C [1996]. Rating the strength of coal mine roof rocks. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, IC 9444. NTIS stock number: PB96-155072.

Mark C, Tuchman RJ, comp. [1997]. Proceedings: New technology for ground control in retreat mining. Pittsburgh, PA: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, DHHS (NIOSH) Publication No. 97-122, IC 9446.

Fotta B, Mallett LG [1997]. Effects of mining height on injury rates in U.S. underground nonlongwall bituminous coal mines. Pittsburgh, PA: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, DHHS (NIOSH) Publication No. 98-104, IC 9447.

#### **Technology News**

U.S. Bureau of Mines [1995]. Updated analysis of longwall pillar stability (ALPS) computer program incorporates new coal mine roof rating (CMRR). Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, Technology News 445.

U.S. Bureau of Mines [1995]. Dust collector discharge shroud reduces dust exposure to drill operators at surface coal mines. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, Technology News 447.

U.S. Bureau of Mines [1995]. Improving the performance of longwall gob gas ventholes. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, Technology News 448.

U.S. Bureau of Mines [1995]. LAYOUT: a bump hazard assessment model. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, Technology News 452.

U.S. Bureau of Mines [1996]. Navigation and control of continuous mining systems for coal mining. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, Technology News 453.

NIOSH [1997]. Technology News 455: Roof hazard alert modules. Pittsburgh, PA: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health.

NIOSH [1997]. Technology News 456: A fault detection neural network for dc trolley system protection. Pittsburgh, PA: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health.

NIOSH [1997]. Technology News 457: Online access of mining health and safety research via the Common Information Service System (CISS). Pittsburgh, PA: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health.

NIOSH [1997]. Technology News 458: Development of a research facility to improve mine hoisting and ore pass safety. Spokane, WA: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health.

NIOSH [1997]. Technology News 459: Ergonomic seat reduces shock for low-seam shuttle car operators. Pittsburgh, PA: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health.

NIOSH [1997]. Technology News 460: Prototype borehole miner selectively extracts gold from permafrost. Spokane, WA: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health.

NIOSH [1997]. Technology News 461: Coal dust explosibility meter. Pittsburgh, PA: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health.

NIOSH [1997]. Technology News 462: Ground penetrating radar for highwall guidance. Pittsburgh, PA: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health.

NIOSH [1997]. Technology News 463: Machine-mounted continuous respirable dust monitor. Pittsburgh, PA: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health.

NIOSH [1997]. Technology News 464: Analysis of retreat mining pillar stability (ARMPS): version 4.0 for Windows. Pittsburgh, PA: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health.

NIOSH [1997]. Technology News 465: Method for predicting methane emissions on extended longwall faces. Pittsburgh, PA: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health.

NIOSH [1997]. Technology News 466: Use of seismic tomography to identify geologic hazards in underground mines. Spokane, WA: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health.

NIOSH [1997]. Technology News 467: Wood crib performance model. Pittsburgh, PA: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health.

NIOSH [1997]. Technology News 468: Tests for Doppler radar technology for haulage truck backup alarms. Spokane, WA: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health.

NIOSH [1998]. Technology News 471: Innovative hazard recognition training for underground limestone miners. Pittsburgh, PA: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health.

NIOSH [1998]. Technology News 472: Ventilation of a 40foot, two-pass, extended cut. Pittsburgh, PA: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health.

NIOSH [1998]. Technology News 473: The explosion hazard from hydrogen gas generation inside sealed frames. Pittsburgh, PA: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health.

NIOSH [1998]. Technology News 474: A passive means to detect hot trolley insulators. Pittsburgh, PA: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health.

NIOSH [1998]. Technology News 475: Roof monitoring safety systemfor underground stone mines. Pittsburgh, PA: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health.

#### **Special Publications**

Maleki H, Wopat PF, Repsher RC, Tuchman RJ, eds. [1995]. Proceedings: Mechanics and Mitigation of Violent Failure in Coal and Hard-Rock Mines. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, Special Publication 01-95. May be ordered from the National Technical Information Service (NTIS), 5285 Port Royal Rd., Springfield, VA 22161; phone (703) 487-4650; fax (703) 321-8547. Please specify the following NTIS stock number when ordering: PB95-211967.

U.S. Bureau of Mines [1995]. Lake Lynn Laboratory (brochure). Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, Special Publication 08-95. Free copy available from Beth L. Gilmore, NIOSH Pittsburgh Research Center, phone (412) 892-6554, e-mail: bcg5@cdc.gov

U.S. Bureau of Mines [1995]. This Is Mining... Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, Special Publication 07-95. Free copy available from Rose Ann Crotsley, NIOSH Pittsburgh Research Center, phone (412) 892-6609, e-mail: rkc6@cdc.gov

#### Dissertations

Iannacchione AT [1997]. Shear strength of saturated clays with floating rock particles [Dissertation]. Pittsburgh, PA: University of Pittsburgh, School of Engineering.

Bauer ER [1998]. The impact of extended depth-of-cut mining on coal mine ground control and worker safety [Dissertation]. University Park, PA: The Pennsylvania State University, Department of Mining Engineering.

Heasley KA [1998]. Numerical modeling of coal mines with a laminated displacement-discontinuity code [Dissertation]. Golden, CO: Colorado School of Mines, Department of Mining and Earth Systems Engineering.

Mallett LG [1998]. Groups in emergency situations: behavior and interaction during escapes from mine fires [Dissertation]. Lexington, KY: University of Kentucky, Department of Sociology.

#### Mining Health and Safety Update

U.S. Department of Energy [1996]. Mining health and safety update, *March issue* (focus on ground control).

U.S. Department of Energy [1996]. Mining health and safety update, *August issue* (focus on human factors).

NIOSH [1997]. Mining health and safety update, Vol. 2, No. 1 (focus on human factors, fires and explosions, life support, equipment safety).

NIOSH [1997]. Mining health and safety update, Vol. 2, No. 2 (focus on haulage, disaster prevention, ground control).

NIOSH [1998]. Mining health and safety update. Vol. 3, No. 1. Pittsburgh, PA: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health. (This issue's focus is on training and work design).

#### Flyers

NIOSH [1998]. Common Information Service System (CISS) (flyer). Pittsburgh, PA: U.S. Department of Health and

Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, DHHS (NIOSH) Publication No. 98-127.

NIOSH [1998]. The Experimental Mine and the Safety Research Coal Mine (flyer). Pittsburgh, PA: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health.

NIOSH [1998]. Mining Surveillance Statistics and Research Support Activity (flyer). Pittsburgh, PA: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, DHHS (NIOSH) Publication No. 98-130.

NIOSH [1998]. National Institute for Occupational Safety and Health, Pittsburgh Research Laboratory (flyer). Pittsburgh, PA: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health.

#### Hazard Identification (Hazard ID)

NIOSH [1997]. Hazard Identification 1: Exposure to silica dust on continuous mining operations using flooded-bed scrubbers. Pittsburgh, PA: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health.

#### **Outside Papers**

(This category includes articles and papers published in peerreviewed/referee journals, conference proceedings, etc.)

Ambrose DH [1995]. Comparing mining techniques and equipment using computer graphics simulation. In: Ozdemir L, Hanna K, eds. Proceedings of the Third International Symposium on Mine Mechanization and Automation. Vol. 1. Golden, CO: Colorado School of Mines, pp. 6-1 to 6-12.

Ambrose DH [1996]. Solid modeling simulations used as an alternative method to study safety issues in mine elevator/hoist systems. In: Proceedings of MINESIM '96 -First International Symposium on Mine Simulation. Athens, Greece: CD-ROM, 13 pp.

Ambrose DH [1997]. Mining equipment safety analysis using computer modeling research tools [Abstract]. In: Abstracts -National Occupational Injury Research Symposium '97. Morgantown, WV: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, p. 45. Anderson D [1996]. Computers in geology, geometry, planning, training, communications: mine mapping, modeling, and visualization systems. Engineering and Mining J *197*(7) 34-35.

Barczak TM, Gearhart DF [1995]. Renewed interest in prop supports as a replacement for wood cribs. In: Peng SS, ed. Proceedings of the 14th International Conference on Ground Control in Mining. Morgantown, WV: West Virginia University, pp. 149-158.

Barczak TM, Wilson JW [1995]. Practical solutions to offset the deficiencies and price of mine timber. In: Daemen JJK, Schultz RA, eds. Proceedings of the 35th U.S. Symposium on Rock Mechanics. Lake Tahoe, NV.

Barczak TM, Gearhart DF [1996]. Shield evaluation and performance testing at the USBM's strategic structures testing laboratory. In: Proceedings of Longwall USA. Pittsburgh, PA: pp. 189-205.

Barczak TM, Molinda GM [1996]. Innovative secondary support technologies for western mines. In: Ozdemir L, Hanna K, Haramy KY, Peng S, eds. Proceedings of the 15th International Conference on Ground Control in Mining. Golden, CO: Colorado School of Mines.

Barczak TM, Zelanko JC, Molinda GM [1996]. Innovative secondary support systems for gate roads. In: Proceedings of Longwall USA. Pittsburgh, PA: pp. 21-43.

Barczak TM, Gearhart DF [1997]. Full-scale performance evaluation of mobile roof supports. In: Peng SS, ed. Proceedings of the 16th International Conference on Ground Control in Mining. Morgantown, WV: West Virginia University, pp. 211-220.

Barczak TM, Gearhart DF [1998]. Performance and safety considerations of hydraulic support systems. In: Peng SS, ed. Proceedings of the 17th International Conference on Ground Control in Mining. Morgantown, WV:University of West Virginia, pp. 176-186.

Barczak TM, Chekan GJ, Babich DR [1998]. Shield design, construction, and operation. In: Proceedings of Longwall USA International Exhibition & Conference, pp. 5-47.

Barrett EA, Fotta B, Rethi LL [1996]. Independent contractor trends in the United States mining industry. In: Proceedings of Minesafe International 1996. Perth, Western Australia, Australia, pp. 357-362.

Barrett EA, Rethi LL, Fotta B [1996]. Elements from comprehensive safety programs in general industry could benefit independent contractors working in the mining industry—part I. Holmes Safety Association Bulletin *Mar*:1-6. Barrett EA, Rethi LL, Fotta B [1996]. Elements from comprehensive safety programs in general industry could benefit independent contractors working in the mining industry—part II. Holmes Safety Association Bulletin *Apr*:1-6.

Barrett EA, Rethi LL [1998]. Underground hazard recognition training. Aggregates Manager 2(11):30-33.

Bartholomae RC, Burks JA [1995]. Occupational noise exposures in underground longwall coal mines. In: Proceedings of Inter-Noise '95. Newport Beach, CA: pp. 833-836.

Bartholomae RC [1996]. Occupational noise in coal mining a continuing problem. In: Proceedings of the 13th Annual International Pittsburgh Coal Conference. Pittsburgh, PA: pp. 959-964.

Bartholomae RC, Burks JA [1996]. Longwall mine noise and recommendations to reduce worker noise exposure. In: Proceedings of Noise-Con 96. Seattle, WA: pp. 949-954.

Bauer ER, Steiner LJ, Hamrick CA [1995]. Extended cut mining and worker safety in underground coal mines. Soc Min Eng preprint 95-60.

Bauer ER, Chekan GJ, Steiner LJ [1997]. Stability evaluation of extended cut mining in underground coal mines. In: Hudson JA, ed. Proceedings of the 36th U.S. Rock Mechanics Symposium. New York, NY: Columbia University, paper No. 302.

Bauer ER, Steiner LJ [1997]. Reducing acute injury from mine roof failures during remote-control mining of extended cuts [Abstract]. In: Abstracts - National Occupational Injury Research Symposium '97. Morgantown, WV: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, p. 61.

Beus MJ, Duda FT Jr., Orr TJ [1995]. A PC-based monitoring system for mine hoisting. In:  $M^{\text{creat}}$  HS, ed. Proceedings of the Third Canadian Conference on Computer Applications in the Mineral Industry. Montreal, Quebec, Canada: McGill University, pp. 646-653.

Beus MJ, McCoy WG [1995]. Mine shaft conveyance loadmonitoring system. In: Proceedings of the 1995 IEEE Industry Applications Society 30th Annual Meeting. Vol. 3. Orlando, FL: pp. 2048-2053.

Beus MJ, Stewart BM, Iverson S [1996]. Design and hazard assessment of mine ore passes. In: Ozdemir L, Hanna K, Haramy KY, Peng S, eds. Proceedings of the 15th International Conference on Ground Control in Mining. Golden, CO: Colorado School of Mines, pp. 297-309.

Beus MJ [1997]. Sensor-enhanced test platform will refine safety measures in underground mines. Sensors 14(8):14.

Beus MJ, Ruff TM, McCoy WG [1997]. Conveyance monitoring to improve mine hoisting safety. In: Proceedings of the IEEE-Industrial Applications Society 32nd Annual Meeting. Vol. 3, pp. 2091-2105.

Beus, M. J., S. R.Iverson, and B. M. Stewart [1998]. Application of Physical Modeling and Particle Flow Analysis To Evaluate Ore-Pass Design. *Transactions of the Institution of Mining and Metallurgy (Section A: Mining Industry)*. V. 106, Sept.-Dec. 1997, pp. A110-A117

Bhatt SK [1995]. Appalachian coal: an overview. Mining Engineering 47(12):1089-1090.

Bockosh GR, Peters RH [1996]. Human factors considerations in another hazardous industry: mining. In: Proceedings of the International Workshop on Human Factors in Offshore Operations. New Orleans, LA.

Boldt CMK [1996]. Improved visibility for operating large haulage equipment. Holmes Safety Association Bulletin *May-June*: 4-7.

Brautigam AL, Kwitowski AJ [1995]. Remote reset for continuous miners used in extended cuts. Holmes Safety Association Bulletin *May-June*:4-7.

Brnich MJ Jr., Mallett LG, Vaught C [1997]. Training future mine emergency responders; part 1: who should be trained and how? Falls Church, VA: U.S. Department of Labor, Mine Safety and Health Administration, Holmes Safety Association Bulletin *Oct*:3-5.

5

Brnich MJ Jr., Mallett LG, Vaught C [1997]. Training future mine emergency responders; part 2: what topics should be included? Falls Church. VA: U.S. Department of Labor, Mine Safety and Health Administration, Holmes Safety Association Bulletin *Nov*:3-5.

Brnich MJ Jr., Vaught C [1997]. Barricading makes a comeback? Falls Church, VA: U.S. Department of Labor, Mine Safety and Health Administration, Holmes Safety Association Bulletin *Nov*:14.

Brnich MJ Jr., Conti RS, Mallett LG, Vaught C, Wiehagen WJ, Derick RL [1998]. Innovative strategies for mine fire preparedness. In: Proceedings of Longwall USA International Exhibition & Conference, pp. 113-122.

Burks JA, Bartholomae RC [1998]. Investigation of intermittency in the noise exposure pattern of longwall coal miners. In: Proceedings of the 16th International Congress on Acoustics and 135th Meeting of the Acoustical Society of America, pp. 1523-1524.

Burks JA, Rider JP, Cecala AB [1998]. Acoustical considerations in the design of minerals processing plants. In: Proceedings of the 1998 National Conference on Noise Control Engineering (Noise-Con 98), pp. 443-448.

Campoli AA, McCall FE, Finfinger GL, Zuber MD [1995]. Longwall dust control potentially enhanced by surface borehole water infusion. In: Wala AM, ed. Proceedings of the Seventh U.S. Mine Ventilation Symposium. Lexington, KY: University of Kentucky, pp. 147-152.

Campoli AA, McCall FE, Finfinger GL, Zuber MD [1995]. Potential for improved longwall dust control by surface borehole water infusion. Soc Min Eng preprint 95-139.

Campoli AA, Tuchman RJ [1995]. United States Bureau of Mines health and safety research. In: Proceedings of the Asia-Pacific Workshop on Coal Mining Technology in Tokyo '95. Tokyo, Japan: Japan Technical Co-operation Center for Coal Resources Development (JATEC), pp. 20-27.

Campoli AA, McCall FE, Finfinger GL, Zuber MD [1996]. Longwall dust control potentially enhanced by surface borehole water infusion. Mining Engineering *48*(7):56-60.

Campoli AA, Rebuck D, Mucho TP, Molinda GM [1996]. State-of-the-art room-and-pillar retreat mining in the Kittanning coalbed. Mining Engineering 48(4):30-35.

Cantrell BK, Stein SW, Patashnick H, Hassel D [1996]. Status of a tapered element, oscillating microbalance-based continuous respirable coal mine dust monitor. Appl Occupational and Environmental Hyg *11*(7):624-629.

Cantrell BK. Watts WF Jr. [1996]. Diesel exhaust aerosol, review of measurement technology. In: The Canadian Adhoc Committee Proceedings of the November 6&7, 1996, Plenary Conference in Toronto, Ontario, Diesel Emissions Exposure Reduction in Mines. Toronto, Ontario, Canada: Canada Centre for Mineral and Energy Technology (CANMET), pp. 7.1-7.9.

Cantrell BK, Watts WF Jr. [1996]. Diesel exhaust aerosol, review of occupational exposure. Soc Min Eng preprint 96-126.

Cantrell BK, Williams KL, Stein SW, Hassel D, Patashnick H [1996]. Continuous respirable mine dust monitor development. In: Bockosh GR, Langton J, Karmis M, eds. Proceedings of the 27th Annual Institute on Mining Health, Safety and Research. Blacksburg, VA: Virginia Polytechnic Institute and State University, pp. 91-102.

Cantrell BK, Watts WF Jr. [1997]. Diesel exhaust aerosol: review of occupational exposure. Appl Occup Environ Hyg *12*(12):1019-1027.

Cantrell BK, Williams KL, Stein SW, Hassel D, Patashnick H [1997]. Continuous respirable mine dust monitor development. In: Ramani RV, ed. Proceedings of the 6th International Mine Ventilation Congress. Chapter 2. Society for Mining, Metallurgy, and Exploration, Inc.: Littleton, CO, pp. 11-17.

Casali JG, Mauney DW, Burks JA [1995]. Physical vs. Psychophysical measurement of hearing protector attenuation—a.k.a. MIRE vs. REAT. Sound and Vibration, Materials Reference, *July*:20-27.

Cashdollar KL [1996]. Coal dust explosibility. J of Loss Prevention in the Process Industries 9(1):65-76.

Cecala AB, Thimons ED, Klinowski GW [1995]. Reducing respirable dust concentrations at mineral-processing facilities using total mill ventilation system. Mining Engineering 47(6): 575-576.

Cecala AB, Daniel JH, Thimons ED [1996]. Methods to lower dust exposures at mineral processing operations. Appl Occupational and Environmental Hyg *11*(7):854-859.

Cecala AB, Thimons ED [1997]. Methods to lower dust exposures at mineral processing operations. In: Proceedings of National Stone Association's 1997 Environmental Safety and Health Forum, pp. 231-249.

Cecala AB, Timko RJ, Prokop AD [1997]. Bag and belt cleaner reduces employee dust exposure. Rock Products 100(3):41-43.

Cecala AB [1998]. Supplementing your dust control equipment with whole-plant ventilation. Powder and Bulk Eng *12*(1):19-32.

Chaiken RF [1997]. Surveillance of disaster: a view from the denominator [Abstract]. In: Abstracts - National Occupational Injury Research Symposium '97. Morgantown, WV: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, p. 13.

Chaiken RF [1998]. Surveillance of disaster: a view from the denominator. In: Proceedings of The International Emergency Management Society (TIEMS) Conference 1998, pp. 37-45.

Chase FE, Mark C, Campoli AA [1995]. Analysis of retreat mining pillar stability. In: Proceedings of the First

International Mine Development, Planning, and Operations Conference. Pittsburgh, PA: pp. 234-251.

Chase FE, Mark C, Campoli AA [1995]. Analysis of retreat mining stability. Soc Min Eng preprint 95-237.

Chase FE, McComas A, Mark C, Barczak TM, Goble CD [1996]. Practical aspects of mobile roof support usage. In: Ozdemir L, Hanna K, Haramy KY, Peng S, eds. Proceedings of the 15th International Conference on Ground Control in Mining. Golden, CO: Colorado School of Mines.

Chekan GJ [1995]. Design considerations for multiple-seam longwall mining. In: Proceedings of the First International Mine Development, Planning, and Operations Conference. Pittsburgh, PA.

Chekan GJ [1998]. Multiple-seam mining. Falls Church, VA: U.S. Department of Labor, Mine Safety and Health Administration, Holmes Safety Association Bulletin *Sept*:7-8.

Chufo RL [1996]. An electromagnetic spatial/spectral sensor for geological measurements. In: Proceedings of the Sixth International Conference on Ground Penetrating Radar. Sendai, Japan: Tohoku University, pp. 545-547.

Coal dust explosibility meter [1997]. Falls Church, VA: U.S. Department of Labor, Mine Safety and Health Administration, Holmes Safety Association Bulletin *Oct*:14-15

Cole GP, Peterson JS [1996]. Developing a rugged and portable data acquisition system for the field. Sensors 13(2): 33-36.

Cole HP, Vaught C, Wiehagen WJ, Haley JV, Brnich MJ Jr. [1998]. Decision making during a simulated mine fire escape. IEEE Transactions on Engineering Management 45(2):153-162.

Colinet JF, Jankowski RA [1997]. Dust control considerations for deep-cut faces when using exhaust ventilation and a flooded-bed scrubber. SME preprint 97-48.

Colinet JF, Jankowski RA [1997]. Ventilation practices on longwall faces in the United States. In: Proceedings of the Fifth International Symposium on Ventilation for Contaminant Control. Ottawa, Ontario, Canada: Session 12-3.

Colinet JF, Spencer ER, Jankowski RA [1997]. Status of dust control technology on U.S. longwalls. In: Ramani RV, ed. Proceedings of the 6th International Mine Ventilation Congress. Chapter 55. Society for Mining, Metallurgy, and Exploration, Inc.: Littleton, CO, pp. 345-351. Colinet JF, Jankowski RA [1998]. Silica collection concerns when using flooded-bed scrubbers. SME preprint 98-131. Littleton, CO: Society for Mining, Metallurgy, and Exploration, Inc.

Conti RS [1995]. Inflatable partitions for high-expansion foam generators. Mining Engineering 47(6):561-566.

Conti RS, Wiehagen WJ, Fowkes RS, Vaught C, Brnich MJ Jr. [1997]. Underground mine fire preparedness—Part 4 of 4: Suggested improvements and implications for training miners in fire-fighting preparedness. Falls Church, VA: U.S. Department of Labor, Mine Safety and Health Administration, Holmes Safety Association Bulletin *Sept*:3-10.

Conti RS, Chasko LL, Pro RW [1998]. Combating mine fires with the aid of inflatable devices. In: Proceedings of the Second International Conference on Fire Research and Engineering, 3-8 August 1997. Gaithersburg, MD: National Institute of Standards and Technology, pp. 441-449.

Cornelius KM, Turin FC [1997]. A case study examining cumulative trauma exposure of coal mine workers. In: Das B, Karwoski W, eds. Advances in Occupational Ergonomics and Safety II. IOS Press and Ohmsha: pp. 569-572.

Cornelius KM, Turin FC [1997]. Reducing roof bolter operator cumulative trauma exposure: ergonomics considerations for reducing cumulative trauma exposure. Falls Church, VA: U.S. Department of Labor, Mine Safety and Health Administration, Holmes Safety Association Bulletin *Jan*:1-8.

Diamond WP [1995]. Gob gas venthole methane drainage: mine safety and global climate change implications [Abstract]. Tenth V. E. McKelvey Forum on Mineral and Energy Resources. Washington, DC.

Diamond WP [1995]. The influence of gob gas venthole location on methane drainage: a case study in the lower Kittanning Coalbed, PA. In: Wala AM, ed. Proceedings of the Seventh U.S. Mine Ventilation Symposium. Lexington, KY: University of Kentucky, pp. 365-370.

Diamond WP, Garcia F, Aul GN, Ray RE [1997]. Analysis and prediction of longwall methane emissions: a case study in the Pocahontas No. 3 Coalbed, VA. In: Ramani RV, ed. Proceedings of the 6th International Mine Ventilation Congress. Chapter 35. Society for Mining, Metallurgy, and Exploration, Inc.: Littleton, CO, pp. 223-229.

Diamond WP, Garcia F, Aul GN, Ray RE [1997]. Influence of mine design on longwall methane emissions and gas

production from methane-drainage boreholes. In: Proceedings of the International Coalbed Methane Symposium. Tuscaloosa, AL: The University of Alabama, pp. 541-550.

Diamond WP, Schatzel SJ [1998]. Measuring the gas content of coal: a review. Int J Coal Geology 35:311-331.

Dobroski H Jr., Tuchman DP, Vinson RP [1997]. Differential pressure as a means of estimating respirable dust mass on collection filters. Appl Occupational and Environmental Hyg 12(12):1047-1051.

Dolinar DR, Tadolini SC, Blackwell DV [1996]. High horizontal movements in longwall gate roads controlled by cable support systems. In: Ozdemir L, Hanna K, Haramy KY, Peng S, eds. Proceedings of the 15th International Conference on Ground Control in Mining. Golden, CO: Colorado School of Mines, pp. 497-509.

Dolinar DR, Oyler DC, Compton CS [1997]. Analysis of extensometer data from a room widening experiment designed to induce a roof fall. In: Peng SS, ed. Proceedings of the 16th International Conference on Ground Control in Mining. Morgantown, WV: West Virginia University, pp. 289-295.

Drake, P. L., R. H. Lambeth, and A. J. Paulson [1995]. Metal Release Characteristics of Tailings in a Marine Environment—A Laboratory Study. Paper in *Decades Later: A Time for Reassessment. Proceedings of the 12th Annual National Meeting of the American Society for Surface Mining and Reclamation*, ed. by G. E. Schuman and G. F. Vance (Gillette, WY, June 3-8, 1995). V. 2, American Society for Surface Mining and Reclamation, 1995, pp. 505-518.

Dubaniewicz TH Jr., Chilton JE [1995]. Fiber-optic powered remote monitor. In: Guzik RP ed. Proceedings of Optical Engineering Midwest '95. Vol. 2622. Chicago, IL: SPIE— The International Society for Optical Engineering, pp. 285-291.

Dubaniewicz TH Jr., Cashdollar KL, Green GM, Cucci GR [1996]. Ignition tests with a fiber-optic powered instrument. In: Proceedings of the 41st Annual ISA Analysis Div. Symposium. Vol. 29. Framingham, MA: pp. 175-184.

Dubaniewicz TH Jr., Kovalchik PG, Scott LW, Fuller MA [1996]. Distributed measurement of conductor temperatures in mine trailing cables using fiber-optic technology. In: Proceedings of the 1996 IEEE Industry Applications Society 31st Annual Meeting. Vol. 4. San Diego, CA: pp. 2480-2483. Dubaniewicz TH Jr., Kovalchik PG, Scott LW, Fuller MA [1998]. Distributed measurement of conductor temperatures in mine trailing cables using fiber-optic technology. IEEE Transactions on Industry Applications *34*(2):395-398.

Edwards JC [1996]. Laboratory- and mine-scale evaluation of smoke detectors [Abstract]. In: Beall K, ed. Annual Conference on Fire Research: Book of Abstracts. Gaithersburg, MD: National Institute of Standards and Technology, pp. 109-110.

Edwards JC, Friel GF, Franks RA, Opferman JJ [1997]. Mine fire detection under zero airflow conditions. In: Ramani RV, ed. Proceedings of the 6th International Mine Ventilation Congress. Chapter 52. Society for Mining, Metallurgy, and Exploration, Inc.: Littleton, CO, pp. 331-336.

Edwards JC [1998]. Overview of mine fire detection. In: Proceedings of the Second International Conference on Fire Research and Engineering, 3-8 August 1997. Bethesda, MD: Society of Fire Protection Engineers, pp. 489-499.

Filigenzi MT [1997]. Simplified pre- and post-processing technique for performing finite-element analysis of deep underground mining. In: Peng SS, ed. Proceedings of the 16th International Conference on Ground Control in Mining. Morgantown, WV: West Virginia University, pp. 320-328.

Fotta B, Turin FC, Murphy JN [1995]. Appalachian coalmining health and safety trends. Mining Engineering 47(12): 1115-1119. Gallagher S, Hamrick CA [1995]. Nature and cost of low back pain. Holmes Safety Association Bulletin *Apr*:14-19.

Fotta B, Rethi LL [1996]. Independent contractor employment and accident trends in metal/nonmetal mining. Holmes Safety Association Bulletin *July*:1-4.

Fotta B, Mallett LG [1997]. Effects of mining height and mine employment size on injury rates in underground bituminous coal mines [Abstrac. In: Abstracts - National Occupational Injury Research Symposium '97. Morgantown, WV: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, p. 62.

Franks RA, Opferman JJ, Friel GF, Edwards JC [1997]. A second-generation remote optical methanometer. In: Proceedings of the 43rd International Instrumentation Symposium. ISA: pp. 527-536.

Friedel MJ, Scott DF, Williams TJ [1997]. Temporal imaging of mine-induced stress change using seismic tomography. Eng Geol *46*(2):131-141.

Gallagher S, Hamrick CA [1995]. Nature and cost of low back pain. Holmes Safety Association Bulletin *Apr*:14-19.

Gallagher S, Hamrick CA [1995]. A scientific look at back belts. Holmes Safety Association Bulletin *Sept*:13-15.

Gallagher S, Hamrick CA [1996]. Trunk extension and flexion in standing and kneeling postures: peak torque and associated electromyography of ten trunk muscles. In: Rastegar S, ed. Proceedings of the 1996 ASME International Mechanical Engineering Congress and Exposition. Atlanta, GA: ASME, pp. 5-6.

Gallagher S, Mayton AG, Unger RL, Hamrick CA, Sonier P [1996]. Computer design and evaluation tool for illuminating underground coal-mining equipment. J of the Illuminating Engineering Society 25(1):3-12.

Gallagher S [1997]. Trunk extension strength and muscle activity in standing and kneeling postures. Spine 22(16):1864-1872.

Gallagher S, Bobick TG [1997]. Effects of posture on back strength and lifting capacity. In: Karwowski W, Wogalter MS, Dempsey PG, eds. Ergonomics and musculoskeletal disorders: research on manual materials handling, 1983-1996. Human Factors and Ergonomics Society: pp. 37-41.

Gallagher S, Hamrick CA, Cornelius KM, Redfern MS [1997]. The effects of vertical space restriction on the moment experienced by the lumbar spine [Abstract]. In: 1997 American Industrial Hygiene Conference & Exposition - Abstracts. Dallas, TX: p. 19.

Gallagher S, Hamrick CA, Love AC [1997]. Biomechanical modeling of asymmetric lifting tasks in constrained lifting postures. In: Karwowski W, Wogalter MS, Dempsey PG, eds. Ergonomics and musculoskeletal disorders: research on manual materials handling, 1983-1996. Human Factors and Ergonomics Society: pp. 86-90.

Gallagher S, Unger RL, Rossi EW [1997]. Effects of lifting in four restricted work postures. In: Karwowski W, Wogalter MS, Dempsey PG, eds. Ergonomics and musculoskeletal disorders: research on manual materials handling, 1983-1996. Human Factors and Ergonomics Society: pp. 56-60.

Gallagher S [1998]. Biomechanics of a cable hanging task. In: Kumar S, ed. Advances in Occupational Ergonomics and Safety - Proceedings of the XIIIth Annual International Occupational Ergonomics and Safety Conference 1998. IOS Press: pp. 244-247. Gallagher S, Llewellyn R, Mattos J [1998]. A comparison of longwall and continuous mining safety in U.S. coal mines, 1988-1997. In: Proceedings of Longwall USA International Exhibition & Conference, pp. 91-101.

Gallagher S, Mayton AG, Merkel R [1998]. An improved seat for underground mobile equipment [Abstract]. In: Abstracts -American Industrial Hygiene Conference & Exposition, p. 13.

Gallagher S, Moore JS, Stobbe TJ [1998]. Physical strength assessment in ergonomics. Fairfax, VA: American Industrial Hygiene Association.

Garcia F, McCall FE, Marshall JK [1995]. Gob gas analyzer system. In: Wala AM, ed. Proceedings of the Seventh U.S. Mine Ventilation Symposium. Lexington, KY: University of Kentucky.

Garcia F, McCall FE, Trevits MA [1995]. A case study of methane gas migration through sealed mine gob into active workings. In: Wala AM, ed. Proceedings of the Seventh U.S. Mine Ventilation Symposium. Lexington, KY: University of Kentucky.

Garcia F, McCall FE, Trevits MA [1995]. Control of methane gas mitigation from a sealed gob area. In: Proceedings of the 26th International Conference on Safety in Mines Research Institutes. Vol. 1. Katowice, Poland: pp. 53-61.

Girard JM, Filigenzi MT [1995]. Seismic studies and numerical modeling at the Homestake Mine, Lead, South Dakota. In: Proceedings of Application of Computers and Operations Research in the Mineral Industries (APCOM XXV 1995). Brisbane, Queensland, Australia: Australasian Institute of Mining and Metallurgy, pp. 501-505.

Girard JM, McKibbin RW, Seymour JB, Jones FM [1997]. Characterization of *in situ* stress conditions at depth—Homestake Mine, Lead, South Dakota. Proceedings of the 36th U.S. Rock Mechanics 3ymposium. New York, NY: Columbia University, paper No. 104.

Girard, J. M., R. T. Mayerle, and E. L. McHugh [1998]. Advances in Remote Sensing Techniques for Monitoring Rock Falls and Slope Failures. Paper in *Proceedings, 17th International Conference on Ground Control in Mining*, ed. by Syd S. Peng (Univ. of WV, Morgantown, WV, Aug. 4-6, 1998). 1998, pp. 326-331.

Glowacki AF [1995]. Using MADSS to analyze mining accident trends on a personal computer. In: Tinney G, Bacho A, Karmis M, eds. Proceedings of the 26th Annual Institute on Mining Health, Safety and Research. Blacksburg, VA: Virginia Polytechnic Institute and State University, p. 133-140.

Glowacki AF [1996]. PC-based software for analyzing U.S. mining accidents, injuries, and illnesses. In: Thompson SD, Grayson RL, Wang YJ, eds. Proceedings of the Fifth Conference on the Use of Computers in the Coal Industry. Morgantown, WV: West Virginia University, pp. 92-99.

Glowacki AF, Brnich MJ Jr., Mallett LG, Unger RL, Vaught C [1996]. Mine emergency response interactive training simulation. In: Proceedings of Minesim '96, the First International Symposium Via the Internet. University of Idaho, National Technical University of Athens, Greece.

Goodman GVR, Taylor CD, Page SJ [1995]. Predictive capabilities of SF<sub>6</sub> tracer gas in face ventilation analysis. J of the Mine Ventilation Society of South Africa 48(3):54-61.

Goodman GVR, Listak JM [1998]. Variations in dust levels with continuous miner position. SME preprint 98-130. Littleton, CO: Society for Mining, Metallurgy, and Exploration, Inc.

Goris JM, Martin LA, Curtin RP [1995]. Shear behavior of cable bolt supports in horizontal bedded deposits. In: Hassani F, Mottahed P, eds. Proceedings of the 97th Annual General Meeting of CIM. Halifax, Nova Scotia, Canada: pp. 92-99.

Goris JM, Martin LA, Curtin RP [1996]. Shear behavior of cable bolt supports in horizontal bedded deposits. In: Ozdemir L, Hanna K, Haramy KY, Peng S, eds. Proceedings of the 15th International Conference on Ground Control in Mining. Golden, CO: Colorado School of Mines, pp. 511-521.

Grau RH III, Bauer ER [1997]. Ground control worker safety during extended cut mining. In: Peng SS, ed. Proceedings of the 16th International Conference on Ground Control in Mining. Morgantown, WV: West Virginia University, pp. 283-288.

Grau RH III, Prosser LJ Jr. [1997]. Scaling accidents in underground stone mines. Rock Products 100(1):39-41.

Grayson RL, Unal A [1998]. Evolution of RFID technology in underground coal mines. Mining Eng 50(4):75-80.

Greninger NB, Cortese RA, Weiss ES [1995]. Suppression of dust explosions using triggered barriers in wide rectangular entries.. In: Proceedings of the 26th International Conference on Safety in Mines Research Institutes. Vol. 2. Katowice, Poland: pp. 59-72. Hamrick CA, Gallagher S [1997]. The effects of lifting posture on trunk muscle activity. In: Karwowski W, Wogalter MS, Dempsey PG, eds. Ergonomics and musculoskeletal disorders: research on manual materials handling, 1983-1996. Human Factors and Ergonomics Society: pp. 128-132.

Hay KE, Signer SP, King ME [1995]. Mobile roof support technology. In: Ozdemir L, Hanna K, eds. Proceedings of the Third International Symposium on Mine Mechanization and Automation. Vol. 2. Golden, CO: Colorado School of Mines, pp. 23-1 to 23-13.

Hay KE, Signer SP, King ME [1995]. Monitoring mobile roof supports. In: Peng SS, ed. Proceedings of the 14th International Conference on Ground Control in Mining. Morgantown, WV: West Virginia University, pp. 55-62.

Heasley KA, Salamon MDG [1996]. New laminated displacement-discontinuity program. In: Aubertin M, Hassani F, Mitri H, eds. Proceedings of the Second North American Rock Mechanics Symposium: NARMS '96. Montreal, Quebec, Canada: pp. 1879-1886.

Heasley KA, Salamon MDG [1996]. New laminated displacement-discontinuity program: fundamental behavior. In: Ozdemir L, Hanna K, Haramy KY, Peng S, eds. Proceedings of the 15th International Conference on Ground Control in Mining. Golden, CO: Colorado School of Mines, pp. 111-125.

Heasley KA, Dubaniewicz TH Jr., DiMartino MD [1997]. Development of a fiber optic stress sensor. In: Hudson JA, ed. Proceedings of the 36th U.S. Rock Mechanics Symposium. New York, NY: Columbia University, paper No. 066.

Heasley KA, Chekan GJ [1998]. Practical stress modeling for mine planning. In: Peng SS, ed. Proceedings of the 17th International Conference on Ground Control in Mining. Morgantown, WV:University of West Virginia, pp. 129-137.

Homce GT, Thalimer JR [1995]. Field test of an alternative approach to electric motor predictive maintenance: design and implementation. Soc Min Eng preprint 94-117.

Homce GT, Thalimer JR [1995]. Reducing unscheduled plant maintenance delays: field test of a new method to predict electric motor failure. In: Proceedings of IEEE 37th Cement Industry Technical Conference. San Juan, Puerto Rico: IEEE-IAS, pp. 49-60.

Homce GT, Thalimer JR [1996]. Reducing unscheduled plant maintenance delays—field test of a new method to predict electric motor failure. IEEE Transactions on Industry Applications. New York, NY: IEEE, 32(3):689-694.

Hwang CC, Edwards JC, Friel GF [1995]. Mathematical modeling of the contaminant dilution along airways at crosscuts. In: Wala AM, ed. Proceedings of the Seventh U.S. Mine Ventilation Symposium. Chapter 46. Lexington, KY: University of Kentucky, pp. 293-298.

Iannacchione AT, Mucho TP, Prosser LJ Jr. [1995]. Ground control problems in the underground limestone industry. In: Proceedings of the Environment, Safety, and Health Forum. Nashville, TN: National Stone Association.

Iannacchione AT [1995]. Safety and ground control in the underground limestone industry. Stone Review *Oct*:36-37.

Iannacchione AT, Mucho TP, Prosser LJ Jr. [1996]. Controlling roof and ribs in underground mines. Aggregates Manager J *Aug/Sept*: 33-37.

Iannacchione AT, Prosser LJ Jr. [1997]. Roof and rib hazard assessment for underground stone mines. SME preprint 97-113.

Iannacchione AT, Prosser LJ Jr., Oyler DC, Dolinar DR, Marshall TE, Compton CS [1997]. Preventing accidents caused by unrecognized roof beam failures in underground stone mines [Abstract]. In: Abstracts - National Occupational Injury Research Symposium '97. Morgantown, WV: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, p. 10.

Iannacchione AT, Dolinar DR, Prosser LJ Jr., Marshall TE, Oyler DC, Compton CS [1998]. Controlling roof beam failures from high horizontal stresses in underground stone mines. In: Aziz NI, Indraratna B, eds. Proceedings of the International Conference on Geomechanics/Ground Control in Mining and Underground Construction. Wollongong, New South Wales, Australia: University of Wollongong, Vol. 2, pp. 525-541.

Iannacchione AT, Dolinar DR, Prosser LJ Jr., Marshall TE, Oyler DC, Compton CS [1998]. Controlling roof beam failures from high horizontal stresses in underground stone mines. In: Peng SS, ed. Proceedings of the 17th International Conference on Ground Control in Mining. Morgantown, WV:University of West Virginia, pp. 102-112.

Iannacchione AT, Prosser LJ Jr. [1998]. Roof and rib hazard assessment for underground stone mines. Mining Eng 50(2):76-80.

Jankowski RA, Kissell FN [1996]. Longwall dust control: review of developments effected in mines in the U.S.A. over the last ten years (in Polish). Maszyny Gornicze J XIV(5): 51-56.

Jankowski RA, Organiscak JA [1996]. An overview of research experience as it relates to shearer dust control in the United States. In: Proceedings of the International Scientific and Technical Conference on Respirable Dust Hazard Control in the World Mining Industry. Szczyrk, Poland: pp. 5-10.

Jankowski RA, Colinet JF [1998]. Longwall dust control: where we are and where we need to go in the 21st century. In: Proceedings of Longwall USA International Exhibition & Conference, pp. 123-138.

Jankowski RA, Colinet JF [1998]. An update on face ventilation research for improved longwall dust control. SME preprint 98-82. Littleton, CO: Society for Mining, Metallurgy, and Exploration, Inc.

Jayaraman NI, Erhard L, Goodman GVR [1996]. Optimizing air curtains for dust control on continuous miner faces: a full-scale model study. Appl Occupational and Environmental Hyg *11*(7):838-844.

Jeran PW [1996]. Mine design: long-term effects of highextraction mining. In: Proceedings of the 13th Annual Meeting of the American Society for Surface Mining and Reclamation. Knoxville, TN: pp. 217-233.

King GW [1995]. Innovative nonrotating underground coal mine bolting module. In: Ozdemir L, Hanna K, eds. Proceedings of the Third International Symposium on Mine Mechanization and Automation. Vol. 2. Golden, CO: Colorado School of Mines, pp. 23-27 to 23-37.

Kovac JG, Kravitz JH, Lazzara CP [1996]. Belt fires and mine escape problems. In: Proceedings of Longwall USA. Pittsburgh, PA: pp. 65-75.

Kovalchik PG, Duda FT [1995]. Speed and position sensors for mine hoists and elevators. In: Proceedings of the 1995 IEEE Industry Applications Society 30th Annual Meeting. Vol. 3. Orlando, FL: pp. 2054-2056.

Kovalchik PG, Scott LW, Duda FT, Dubaniewicz TH Jr. [1997]. Investigation of ampacity derating factors for shuttle cars using fiber optics technology. In: Proceedings of the IEEE-Industrial Applications Society 32nd Annual Meeting.

Kovalchik PG, Scott LW, Dubaniewicz TH Jr., Duda FT [1998]. Dynamic temperature measurement of overheated shuttle car trailing cables in underground coal mines. SME preprint 98-21. Littleton, CO: Society for Mining, Metallurgy, and Exploration, Inc.

Kowalski KM [1995]. A human component to consider in your emergency management plans: the critical incident stress factor. Safety Science 20:115-123.

Kowalski KM, Fotta B, Barrett EA [1995]. Modifying behavior to improve miners' hazard recognition skills through training. In: Tinney G, Bacho A, Karmis M, eds. Proceedings of the 26th Annual Institute on Mining Health, Safety and Research. Blacksburg, VA: Virginia Polytechnic Institute and State University, pp. 95-104.

Kowalski KM, Mallett LG, Brnich MJ Jr. [1996]. Leadership characteristics in escape from three underground mine fires. In: Wybo JL, Therrien M-C, Guarnieri F, eds. Proceedings of the International Emergency Management and Engineering Conference. Montreal, Quebec, Canada: pp. 317-326.

Kowalski KM [1997]. Training: "highlighted" versus "degraded" technique. Falls Church, VA: U.S. Department of Labor, Mine Safety and Health Administration, Holmes Safety Association Bulletin *Nov*:19.

Kowalski KM [1998]. A human component to consider in your emergency management plans: the critical incident stress factor. Falls Church, VA: U.S. Department of Labor, Mine Safety and Health Administration, Holmes Safety Association Bulletin *Aug*:3-8.

Kwitowski AJ [1995]. Coal mining. McGraw-Hill Yearbook of Science & Technology, pp. 49-52.

Kwitowski AJ, Brautigam AL, Monaghan WD [1995]. Teleoperated continuous mining machine for improved safety. Mining Engineering 47(8):753-759.

Larson MK, Stewart C, Stevenson M, King ME, Signer SP [1995]. A case study of a deformation mechanism around a two-entry gateroad system involving probable time-dependent deformation. In: Peng SS, ed. Proceedings of the 14th International Conference on Ground Control in Mining. Morgantown, WV: West Virginia University, pp. 295-304.

Larson MK, Dunford JP [1996]. Two case studies of the performance of rib supports. In: Ozdemir L, Hanna K, Haramy KY, Peng S, eds. Proceedings of the 15th International Conference on Ground Control in Mining. Golden, CO: Colorado School of Mines, pp. 527-542.

Larson MK, Maleki H [1996]. Geotechnical factors influencing a time-dependent deformation mechanism around an entry in a dipping seam. In: Ozdemir L, Hanna K, Haramy KY, Peng S, eds. Proceedings of the 15th International Conference on Ground Control in Mining. Golden, CO: Colorado School of Mines, pp. 699-710.

Larson, Mark K. [1998]. A Static Fatigue Constitutive Law for Joints in Weak Rock. Paper in Mechanics of Jointed and Faulted Rock, Proceedings of the Third International Conference on Mechanics of Jointed and Faulted Rock, ed. by Hans-Peter Rossmanith (Vienna, Austria, April 6-9, 1998). Balkema, 1998, pp. 171-177.

Larson M. K., S. R. Iverson, B. M. Stewart, and K. Walker [1998]. Preliminary Assessment of Particle Flow Code as a Tool To Assess Ore Pass Safety. Paper presented at Rock Mechanics, Earth Crust Mechanics: 3rd N. American Rock Mechanics Symp. (Cancun, Quintana Roo, Mexico, June 3-5, 1998). *Inernational Journal of Rock Mechanics & Mining Science*, paper 92, Vol. 35, Nos. 4-5, 1998. (Available on CD-ROM,)

Lebecki K, Krzystolik P, Śliż J, Dyduch Z, Cybulski K, Sapko MJ, Greninger NB [1995]. Control of dust explosions in multiple-entry gate systems. In: Proceedings of the 26th International Conference on Safety in Mines Research Institutes. Vol. 2. Katowice, Poland: pp. 73-87.

Lineberry GT, Wiehagen WJ [1996]. The cost relationship between performance engineering and human behavior. Trans Soc Min Eng, Vol. 298, pp. 1932-1935.

Litton CD [1996]. The role of specific absorption in defining explosibility of coal dust/air and coal dust/rock dust/air mixtures. In: Transport Phenomena in Combustion. Vol. 2, pp. 1441-1452.

Litton CD [1997]. Diesel-discriminating mine fire sensors. In: Dhar BB, Bhowmick BC, eds. Proceedings of the 27th International Conference of Safety in Mines Research Institutes. Vol. 2. New Delhi, India: Oxford & IBH Publishing Co. Pvt. Ltd., pp. 1013-1022.

Lucci CE, Cashdollar KL, Sapko MJ [1995]. Coal dust explosibility meter. In: Proceedings of the 26th International Conference on Safety in Mines Research Institutes. Vol. 4. Katowice, Poland: pp. 139-146.

Lucci CE, Cortese RA [1995]. Instruments for measuring dust accumulation and composition in underground coal mines. In: Wala AM, ed. Proceedings of the Seventh U.S. Mine Ventilation Symposium. Lexington, KY: University of Kentucky, pp. 141-146.

Machine-mounted continuous respirable dust monitor [1997]. Falls Church, VA: U.S. Department of Labor, Mine Safety and Health Administration, Holmes Safety Association Bulletin *Oct*:20-21.

Mainiero RJ, Weiss ES [1995]. Blast wave propagation in underground mines. In: Proceedings of the 11th Symposium on Explosives and Blasting Research. Nashville, TN: pp. 47-61.

Mainiero RJ, Miron Y, Kwak SSW, Kopera LH, Wheeler JQ [1996]. Impact, thermal and shock sensitivity of molten TNT and of asphalt-contaminated molten TNT. In: Proceedings of the 22nd Annual Conference on Explosives and Blasting

Technique. Orlando, FL: International Society of Explosives Engineers.

Mainiero RJ [1997]. A technique for measuring toxic gases produced by blasting agents. In: Proceedings of the 23rd Annual Conference on Explosives and Blasting Technique. Cleveland, OH: International Society of Explosives Engineers, pp. 595-604.

Maleki H, McKibbin RW, Jones FM, Wheeler RA [1995]. Application of numerical modeling to the analysis of strata interactions. In: Mitri HS, ed. Proceedings of the Third Canadian Conference on Computer Applications in the Mineral Industry. Montreal, Quebec, Canada: McGill University, pp. 187-196.

Maleki H, Hollberg K [1995]. Assessment of structural stability through measurements. In: Yoshinaka R, Kikuchi K, eds. Proceedings of the International Workshop on Rock Foundations. Tokyo, Japan.

Maleki H, Johnston JL [1996]. Application of tomographic imaging to stability assessment. In: Ozdemir L, Hanna K, Haramy KY, Peng S, eds. Proceedings of the 15th International Conference on Ground Control in Mining. Golden, CO: Colorado School of Mines, pp. 369-383.

Maleki H, White BG [1997]. Geotechnical factors influencing violent failure in U.S. mines. In: Broch E, Myrvang A, Stjern G, eds. Proceedings of the International Symposium on Rock Support: Applied Solutions for Underground Structures, pp. 208-221.

Maleki H, Zahl EG, Dunford JP [1997]. Development of a statistical-analytical approach for assessing coal bump potential. In: Peng SS, ed. Proceedings of the 16th International Conference on Ground Control in Mining. Morgantown, WV: West Virginia University, pp. 304-310.

Mallett L, Vaught C, Brnich MJ Jr. [1996] Emergency response veterans share the lessons they've ic...ned. Holmes Safety Association Bulletin *Oct*:5-8.

Mark C, Chase FE, Campoli AA [1995]. Analysis of retreat mining pillar stability. In: Peng SS, ed. Proceedings of the 14th International Conference on Ground Control in Mining. Morgantown, WV: West Virginia University.

Mark C [1996]. Design of U.S. longwall gate entry systems. In: Milestones in Rock Engineering - The Bieniawski Jubilee Collection. Balkema: pp. 291-307.

Mark C, Barton TM [1996]. A new look at the uniaxial compressive strength of coal. In: Aubertin M, Hassani F, Mitri H, eds. Proceedings of the Second North American Rock Mechanics Symposium: NARMS '96. Montreal, Quebec, Canada, pp. 405-412. Mark C, Barton TM [1996]. The uniaxial compressive strength of coal: should it be used to design pillars? In: Ozdemir L, Hanna K, Haramy KY, Peng S, eds. Proceedings of the 15th International Conference on Ground Control in Mining. Golden, CO: Colorado School of Mines, pp. 61-78.

Mark C, Molinda GM [1996]. Rating coal mine roof strength from exploratory drill core. In: Ozdemir L, Hanna K, Haramy KY, Peng S, eds. Proceedings of the 15th International Conference on Ground Control in Mining. Golden, CO: Colorado School of Mines, pp. 415-428.

Mark C, McCall FE, Pappas DM [1997]. A statistical overview of retreat mining of coal pillars in the United States. In: Peng SS, ed. Proceedings of the 16th International Conference on Ground Control in Mining. Morgantown, WV: West Virginia University, pp. 204-210.

Mark C, Mucho TP, Dolinar D [1997]. Horizontal stress and longwall headgate ground control. SME preprint 97-187.

Mark C [1998]. Application of the coal mine roof rating (CMRR) to extended cuts. SME preprint 98-190. Littleton, CO: Society for Mining, Metallurgy, and Exploration, Inc.

Mark C [1998]. Comparison of ground conditions and ground control practices in the United States and Australia. In: Peng SS, ed. Proceedings of the 17th International Conference on Ground Control in Mining. Morgantown, WV:University of West Virginia, pp. 63-71.

Mark C, Mucho TP, Dolinar D [1998]. Horizontal stress and longwall headgate ground control. Min Eng Jan:61-68.

Mark C, Su D, Heasley KA [1998]. Recent developments in coal pillar design in the United States. In: Aziz NI, Indraratna B, eds. Proceedings of the International Conference on Geomechanics/Ground Control in Mining and Underground Construction. Wollongong, New South Wales, Australia: University of Wollongong, Vol. 7 pp. 309-324.

Martin LA, Girard JM, Curtin RP [1996]. Laboratory pull tests of resin-grouted cable bolts. In: Ozdemir L, Hanna K, Haramy KY, Peng S, eds. Proceedings of the 15th International Conference on Ground Control in Mining. Golden, CO: Colorado School of Mines, pp. 455-468.

Mayton AG, Sonier P, Gallagher S, Hamrick CA [1995]. Computer design/evaluation tool for illuminating underground coal mining equipment. In: Proceedings of the 1995 Illumination Engineering Society of North America. New York, NY: Illumination Engineering Society, pp. 419-440.

Mayton AG, Gallagher S, Merkel R [1997]. Ergonomic seat with viscoelastic foam reduces shock on underground mobile equipment. In: Das B, Karwoski W, eds. Advances in Occupational Ergonomics and Safety II. IOS Press and Ohmsha: pp. 177-180.

Mayton AG, Merkel R, Gallagher S [1997]. Lower injury risk for underground low-coal equipment operators using ergonomic seat with viscoelastic foam [Abstract]. In: Abstracts -National Occupational Injury Research Symposium '97. Morgantown, WV: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, p. 61.

Mayton AG, Gallagher S, Merkel R [1998]. Ergonomic seat with viscoelastic foam reduces shock on underground mobile equipment. Falls Church, VA: U.S. Department of Labor, Mine Safety and Health Administration, Holmes Safety Association Bulletin *Apr*:12-13.

Mayton AG, Merkel R, Gallagher S [1998]. Shock reduction for low-coal shuttle car operators using viscoelastic seating foam. SME preprint 98-44. Littleton, CO: Society for Mining, Metallurgy, and Exploration, Inc.

McDonald JF, Cantrell BK, Watts WF Jr., Bickel KL [1997]. Evaluation of a soybean oil based diesel fuel in an underground gold mine. CIM Bulletin 90(1015):91-95.

McKewan WM [1997]. Wire rope retirement criteria. Organisation Internationale pour l'Etude de l'Endurance des Cables (OIPEEC) (International Organization for the Study of the Endurance of Wire Ropes) Bulletin 73, pp. 21-36.

Metzler RW, Tuchman RJ [1997]. Future directions of mine health and safety in the USA. In: Proceedings of the Queensland Mining Industry Health and Safety Conference. Yeppoon, Queensland, Australia: pp. 6-14.

Miller A, Daly D, Connors S [1997]. Reach enhancement of a submerged waterjet using air shrouding. In: Hashish M, ed. Proceedings of the 9th American Waterjet Conference. Vol. 1, pp. 347-363.

Miller, Art [1998]. Prototype Borehole Miner Selectively Extracts Gold from Permafrost. *Holmes Safety Association Bulletin*, Feb. 1998, pp. 20-21. (Reprint of *Technology News* 460.)

Miscoe AJ, McKewan WM [1997]. Pittsburgh wire rope research centre. Organisation Internationale pour l'Etude de l'Endurance des Cables (OIPEEC) (International Organization for the Study of the Endurance of Wire Ropes) Bulletin 73, pp. 37-43.

Mitchell-Dubaniewicz J [1998]. Emerging technologies in underground coal mining. In: Chiang S, ed. Proceedings of the 15th Annual International Pittsburgh Coal Conference. Pittsburgh, PA: Pittsburgh Coal Conference. Mohamed MAK, Mutmansky JM, Jankowski RA [1996]. Overview of proven low cost and high efficiency dust control strategies for mining operations. Mining Technology 78(897): 141-148.

Molinda GM, Mark C [1996]. Rating the strength of coal mine roof rocks. In: Aubertin M, Hassani F, Mitri H, eds. Proceedings of the Second North American Rock Mechanics Symposium: NARMS '96. Montreal, Quebec, Canada: pp. 413-422.

Molinda GM, Monaghan WD, Mowrey GL, Persetic GF [1996]. Using ground penetrating radar for roof hazard detection in underground mines. In: Thompson SD, Grayson RL, Wang YJ, eds. Proceedings of the Fifth Conference on the Use of Computers in the Coal Industry. Morgantown, WV: West Virginia University, pp. 193-203.

Molinda GM, Monaghan WD, Mowrey GL, Persetic GF [1996]. Using ground penetrating radar for roof hazard detection in underground mines. In: Ozdemir L, Hanna K, Haramy KY, Peng S, eds. Proceedings of the 15th International Conference on Ground Control in Mining. Golden, CO: Colorado School of Mines, pp. 385-402.

Molinda GM, Dolinar DR, Barczak TM, Hustus J [1997]. Performance of various standing and cribless tailgate support configurations in a large eastern coal mine. In: Peng SS, ed. Proceedings of the 16th International Conference on Ground Control in Mining. Morgantown, WV: West Virginia University, pp. 9-15.

Molinda GM, Mark C [1997]. New coal mine roof rating (CMRR) improves safety in U.S. underground mines. In: Dhar BB, Bhowmick BC, eds. Proceedings of the 27th International Conference of Safety in Mines Research Institutes. Vol. 2. New Delhi, India: Oxford & IBH Publishing Co. Pvt. Ltd., pp. 1001-1011.

Molinda GM, Mark C, Bauer ER, Babich DR, Pappas DM [1998]. Factors influencing intersection stability in U.S. coal mines. In: Peng SS, ed. Proceedings of the 17th International Conference on Ground Control in Mining. Morgantown, WV:University of West Virginia, pp. 267-275.

Mowrey GL, Ganoe CW [1995]. An infrared-based coal interface detection system. In: Ozdemir L, Hanna K, eds. Proceedings of the Third International Symposium on Mine Mechanization and Automation. Vol. 1. Golden, CO: Colorado School of Mines, pp. 3-21 to 3-31.

Mowrey GL, Ganoe CW, Monaghan WD [1995]. A radarbased highwall rib thickness monitoring system. Soc Min Eng preprint 95-163. Mowrey GL, Ganoe CW, Monaghan WD [1996]. A radarbased highwall rib-thickness monitoring system. Trans Soc Min Eng, Vol. 298, pp. 1865-1869.

Mucho TP, Mark C, Zelanko JC, Compton CS [1995]. Roof support performance in high stress conditions. In: Peng SS, ed. Proceedings of the 14th International Conference on Ground Control in Mining. Morgantown, WV: West Virginia University.

Mucho TP, Compton CS, Oyler DC, Zelanko JC, Horvath S [1996]. An evaluation of strata behavior and tailgate support performance of Eagle Nest Mine. In: Ozdemir L, Hanna K, Haramy KY, Peng S, eds. Proceedings of the 15th International Conference on Ground Control in Mining. Golden, CO: Colorado School of Mines, pp. 523-526.

Mucho TP [1998]. In the field—cribs versus cables. Falls Church, VA: U.S. Department of Labor, Mine Safety and Health Administration, Holmes Safety Association Bulletin *Mar*:5-6.

Mucho TP [1998]. In focus—cable bolts: a "new" support. Falls Church, VA: U.S. Department of Labor, Mine Safety and Health Administration, Holmes Safety Association Bulletin *Mar*:3-4.

Murphy JN [1996]. Update on mining health and safety research. In: Bockosh GR, Langton J, Karmis M, eds. Proceedings of the 27th Annual Institute on Mining Health, Safety and Research. Blacksburg, VA: Virginia Polytechnic Institute and State University, pp. 3-8.

Murphy JN [1996]. The use of computers in the coal industries. In: Thompson SD, Grayson RL, Wang YJ, eds. Proceedings of the Fifth Conference on the Use of Computers in the Coal Industry. Morgantown, WV: West Virginia University, pp. 223-225.

Murphy JN [1997]. United States mining health and safety research. In: Dhar BB, Bhowmick BC, eds. Proceedings of the 27th International Conference of Safety in Mines Research Institutes. Vol. 1. New Delhi, India: Oxford & IBH Publishing Co. Pvt. Ltd., pp. 15-19.

Murphy JN [1997]. Update on the continuing functions of the former U.S. Bureau of Mines. Mining Engineering 49(6):87-89.

Murphy JN [1997]. Update: mining health and safety research. Coal age *102*(2):40-42.

Murphy JN [1998]. Highlights of the 27th International Conference on Safety in Mines Research Institutes. Eng & Mining J *199*(5):32GG-32JJ. NIOSH [1998]. Navigation and control of continuous mining systems. NASA Tech Briefs 22(6):10b-11b.

Organiscak JA, Smith AC, Diamond WP, Mucho TP [1995]. Examination of bleederless ventilation practices for spontaneous combustion control in U.S. coal mines. In: Wala AM, ed. Proceedings of the Seventh U.S. Mine Ventilation Symposium. Lexington, KY: University of Kentucky, pp. 161-166.

Organiscak JA, Jankowski RA [1996]. U.S. longwall practices for controlling respirable dust sources outby the shearing machine. In: Proceedings of the International Scientific and Technical Conference on Respirable Dust Hazard Control in the World Mining Industry. Szczyrk, Poland: pp. 19-25.

Organiscak JA, Khair AW, Ahmad M [1996]. Studies of bit wear and respirable dust generation. Trans Soc Min Eng, Vol. 298, pp. 1932-1935.

Organiscak JA, Mark C, Jankowski RA, Thimons ED [1996]. Health and safety implications of semiautonomous longwall operations. In: Proceedings of Longwall USA. Pittsburgh, PA: pp. 1-13.

Organiscak JA, Mark C, Jankowski RA, Thimons ED [1996]. Health and safety implications of U.S. semiautonomous longwall operations. Soc Min Eng preprint 96-51.

 Oyler DC, Frith R, Dolinar D, Mark C [1998]. International experience with longwall mining into predriven rooms. In: Peng SS, ed. Proceedings of the 17th International Conference on Ground Control in Mining. Morgantown, WV: University of West Virginia, pp. 44-53.

Page SJ, Organiscak JA, Lichtman K [1997]. The cost of respirable coal mine dust: an analysis based on new black lung claims. Appl Occup Environ Hyg *12*(12):832-839.

Pappas DM, Vallejo LE [1997]. The settlement and degradation of nondurable shales associated with coal mine waste embankments. In: Hudson JA, ed. Proceedings of the 36th U.S. Rock Mechanics Symposium. New York, NY: Columbia University, paper No. 241.

Peters RH [1995]. Bureau of Mines holds seminars on improving safety at small underground mines. Holmes Safety Association Bulletin *Feb*:23.

Peters RH [1995]. Encouraging self-protective employee behavior: what do we know? In: Tinney G, Bacho A, Karmis M, eds. Proceedings of the 26th Annual Institute on Mining Health, Safety and Research. Blacksburg, VA: Virginia Polytechnic Institute and State University, pp. 83-94.

Peters RH [1997]. Encouraging worker participation in safety programs: a selected review of research findings [Abstract]. In: Abstracts - National Occupational Injury Research Symposium '97. Morgantown, WV: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, p. 4.

Peters RH [1997]. Management practices affecting safety: an overview of coal industry research findings [Abstract]. In: Abstracts - National Occupational Injury Research Symposium '97. Morgantown, WV: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, pp. 4-5.

Peters RH, Bockosh GR, Fotta B [1997]. Overview of U.S. research on three approaches to ensuring that coal miners work safely: management, workplace design, and training. In: Proceedings of the Japan Technical Cooperation Center for Coal Resources Development. Tokyo, Japan.

Peterson JS, Cole GP [1996]. Computer-assisted trolley fault detection using neural networks. NASA Tech Briefs 20(1).

Peterson JS, Cole GP [1997]. Electrical fault detection on downed dc trolley lines. SME preprint 97-38.

Randolph RF [1996]. What is human factors research? Holmes Safety Association Bulletin *Dec*:18.

Randolph RF, Boldt CMK [1996]. Safety analysis of surface haulage accidents. In: Bockosh GR, Langton J, Karmis M, eds. Proceedings of the 27th Annual Institute on Mining Health, Safety and Research. Blacksburg, VA: Virginia Polytechnic Institute and State University, pp. 29-38.

Randolph RF, Steiner LJ [1996]. Mining health and safety on the Internet. In: Thompson SD, Grayson RL, Wang YJ, eds. Proceedings of the Fifth Conference on the Use of Computers in the Coal Industry. Morgantown, WV: West Virginia University, pp. 178-184.

Randolph RF, Boldt CMK [1997]. Safety analysis of surface haulage accidents—Part 1. Falls Church, VA: U.S. Department of Labor, Mine Safety and Health Administration, Holmes Safety Association Bulletin *May-June*:1-7.

Randolph RF, Boldt CMK [1997]. Safety analysis of surface haulage accidents—Part 2. Falls Church, VA: U.S.

Department of Labor, Mine Safety and Health Administration, Holmes Safety Association Bulletin *July*:6-7.

Rethi LL, Wiehagen WJ [1995]. Experimental training to reduce variability in the interpretation and application of machine guarding requirements. Holmes Safety Association Bulletin *Mar*:4-9.

Rethi LL, Fotta B [1996]. Independent contractor accident trends in the coal mining industry. Holmes Safety Association Bulletin Aug:1-4.

Rider JP, Thimons ED, Prokop AD [1996]. Reducing longwall noise with acoustical material on the shields a preliminary analysis. In: Proceedings of Longwall USA. Pittsburgh, PA: pp. 159-171.

Rider JP, Taylor CD, Thimons ED [1997]. Measuring lowlevel methane concentrations with an air bag sampling system. J of the Mine Ventilation Society of South Africa 50(2):47-56.

Rider JP, Taylor CD, Zimmer JA [1997]. Evaluating ventilation parameters for extended-cut mining. SME preprint 97-148.

Ruhe TC, Bajpayee TS [1996]. Low temperature limits for mixing recycled oil, diesel fuel, and ammonium nitrate to make ANFO-type blasting agents. In: Proceedings of the 22nd Annual Conference on Explosives and Blasting Technique. Orlando, FL: International Society of Explosive Engineers, pp. 232-243.

Ryan MW [1995]. Alternatives to oxyacetylene metal-cutting. Mining Engineering 47(3):269-271.

Ryan MW [1995]. The impact of airflow changes on the hazards on direct fighting of fires involving conveyor belting. In: Proceedings of the 26th International Conference on Safety in Mines Research Institutes. Vol. 4. Katowice, Poland: pp. 53-67.

Sammarco JJ [1996]. A guidance sensor for continuous mine haulage. In: Proceedings of the 1996 IEEE Industry Applications Society 31st Annual Meeting. Vol. 4. San Diego, CA: pp. 2465-2472.

Sammarco JJ [1997]. Evaluation of a continuous haulage guidance sensor. In: Gurgenci H, Hood M, eds. Proceedings of the Fourth International Symposium on Mine Mechanisation and Automation. Vol. 2. Brisbane, Queensland, Australia: pp. B6-21 to B6-32.

Sammarco JJ [1997]. Progress in developing software safety guidelines for the mining industry. In: Gurgenci H, Hood M, eds. Proceedings of the Fourth International Symposium on

Mine Mechanisation and Automation. Vol. 2. Brisbane, Queensland, Australia: pp. B9-9 to B9-15.

Sammarco JJ, Kohler JL, Novak T, Morley LA [1997]. Safety issues and the use of software-controlled equipment in the mining industry. In: Proceedings of the IEEE-Industrial Applications Society 32nd Annual Meeting.

Sammarco JJ, Kohler JL, Novak T, Morley LA [1997]. Safety issues and the use of software-controlled equipment in the mining industry. In: Lindsay PA, ed. Proceedings of the 1997 Australian Workshop on Industrial Experience With Safety Critical Systems and Software. Australian Computer Society: pp. 25-32.

Sammarco JJ, Kohler JL, Novak T, Morley LA [1997]. Safety issues and the use of software-controlled equipment in the mining industry [Abstract]. In: Abstracts - National Occupational Injury Research Symposium '97. Morgantown, WV: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, p. 61.

Santis LD, Rowland JH, Viscusi DJ, Wesolowski MH [1995]. The large chamber test for toxic fumes analysis of permissible explosives. In: Proceedings of Conference on Explosives and Blasting Technique. Nashville, TN, pp. 431-435.

Santis, LD, Cortese RA [1996]. A method of measuring continuous detonation rates using off-the-self items. In: Proceedings of the 22nd Annual Conference on Explosives and Blasting Technique. Orlando, FL: International Society of Explosive Engineers, pp. 154-164.

Santis LD [1997]. Fire protection provided by detonator containers. In: Proceedings of the 23rd Annual Conference on Explosives & Blasting Technique. International Society of Explosives Engineers, pp. 487-498.

Santis LD ['998]. The calculated risk of experiencing a lightning-caused unplanned detonation. In: Proceedings of the 14th Annual Symposium on Explosives and Blasting Research. International Society of Explosives Engineers: pp. 107-119.

Sapko MJ, Weiss ES, Cashdollar KL, Zlochower IA [1998]. Experimental Mine and laboratory dust explosion research at NIOSH. In: Proceedings of the International Symposium on Hazards, Prevention, and Mitigation of Industrial Explosions. Schaumburg, IL: Safety Consulting Engineers, Inc., pp. 120-142

Schatzel SJ [1995]. A characterization of frictional ignitions in underground coal mines. In: Wala AM, ed. Proceedings of the Seventh U.S. Mine Ventilation Symposium. Vol. 7. Lexington, KY: University of Kentucky, pp. 263-268. Schatzel SJ [1995]. The modified direct method for gas content evaluation [Abstract]. Tenth V. E. McKelvey Forum on Mineral and Energy Resources. Washington, DC.

Schatzel SJ, Garcia F, Marshall JK, Ingram DK [1995]. Monitoring of methane emissions during extended cut coal mining operations in the book cliff fields, Utah [Abstract]. In: Proceedings of the Geological Society of America Annual Meeting. New Orleans, LA.

Schatzel SJ, Diamond WP, Garcia F [1998]. A characterization of gas movement and methane control techniques in longwall gobs using tracer gas [Abstract]. In: Proceedings of the North American Coaled Methane Forum Spring '98 Session.

Schiffbauer WH [1996]. Navigation and control of continuous mining systems for coal mining. In: Proceedings of the 1996 IEEE Industry Applications Society 31st Annual Meeting. Vol. 4. San Diego, CA: pp. 2473-2479.

Schiffbauer WH [1997]. Pursuit of accurate navigation and control of continuous mining machines for coal mining. In: Gurgenci H, Hood M, eds. Proceedings of the Fourth International Symposium on Mine Mechanisation and Automation. Vol. 2. Brisbane, Queensland, Australia: pp. B6-33 to B6-46.

Schnakenberg GH Jr. [1996]. Progress toward a reduced exposure mining system. Soc Min Eng preprint 96-74.

Schnakenberg GH Jr. [1997]. Progress toward a reduced exposure mining system. Mining Engineering 49(2):73-77.

Scott DF, Friedel MJ, Jackson MJ, Williams TJ, Olson MS [1995]. 3-D tomographic imaging of anomalous condition in a deep silver mine. J of Appl Geophysics 34:1-21.

Scott DF, Williams TJ, Friedel MJ [1996]. Application of seismic tomography in underground mining. In: Ozdemir L, Hanna K, Faramy KY, Peng S, eds. Proceedings of the 15th International Conference on Ground Control in Mining. Golden, CO: Colorado School of Mines, pp. 647-659.

Scott DF, Williams TJ, Friedel MJ [1997]. Investigation of a rock-burst site, Sunshine Mine, Kellogg, Idaho. In: Gibowicz SJ, Lasocki S, eds. Proceedings of the 4th International Symposium on Rockbursts and Seismicity in Mines. Balkema: pp. 311-315.

Scott DF, Williams TJ, Freidel MJ, Denton DK [1997]. Relative stress conditions in an underground pillar, Homestake Mine, Lead, SD. Proceedings of the 36th U.S. Rock Mechanics Symposium. New York, NY: Columbia University, paper No. 278. Scott, D. F., T. J. Williams, and D. K. Denton [1998]. Use of Seismic Tomography To Identify Geologic Hazards in Underground Mines. *The Professional Geologist*, Vol. 35, No. 7, June 1998, pp. 3-5.

Seymour JB, Tesarik DR, McKibbin RW [1996]. Stability of permafrost gravels in an Alaskan underground placer mine. In: Myrvang AM, Vik J, eds. Proceedings of the Fourth International Symposium on Mining in the Arctic. Longyearbyen, Svalbard, Norway: pp. 147-156.

Seymour, Brad, Doug Tesarik, Mark Larson, and Joe Shoemaker [1998]. Stability of Backfilled Cross-Panel Entries During Longwall Mining. Paper in *Proceedings of 17th International Conference on Ground Control in Mining*, ed. by Syd S. Peng (Univ. of WV, Morgantown, WV, Aug. 4-6, 1998). 1998, pp. 11-20

Signer SP, Cox DJ, Johnston JL [1997]. A method for the selection of rock support based on bolt loading measurements. In: Broch E, Myrvang A, Stjern G, eds. Proceedings of the International Symposium on Rock Support: Applied Solutions for Underground Structures, pp. 388-399.

Signer SP, Cox DJ, Johnston JL [1997]. A method for the selection of rock support based on bolt loading measurements. In: Peng SS, ed. Proceedings of the 16th International Conference on Ground Control in Mining. Morgantown, WV: West Virginia University, pp. 183-190.

Signer, Stephen P., and John L. Lewis [1998]. A Case Study of Bolt Performance in a Two-Entry Gateroad. Paper in *Proceedings*, 17th International Conference on Ground Control in Mining, ed. by Syd S. Peng (Univ. of WV, Morgantown, WV, Aug. 4-6, 1998). 1998, pp. 249-256.

Smith AC, Rumancik WP, Lazzara CP [1995]. SPONCOM a computer program for the prediction of the spontaneous combustion potential of an underground coal mine. In: Proceedings of the 26th International Conference on Safety in Mines Research Institutes. Vol. 4. Katowice, Poland: pp. 39-52.

Smith AC, Pro RW, Lazzara CP [1995]. The performance of automatic sprinkler systems in the extinguishment of incipient and propagating conveyor belt fires under ventilation conditions. In: Wala AM, ed. Proceedings of the Seventh U.S. Mine Ventilation Symposium. Lexington, KY: University of Kentucky.

Smith AC, Rumancik WP, Lazzara CP [1996]. SPONCOM - a computer program for the prediction of the spontaneous combustion potential of an underground coal mine. In:

Thompson SD, Grayson RL, Wang YJ, eds. Proceedings of the Fifth Conference on the Use of Computers in the Coal Industry. Morgantown, WV: West Virginia University, pp. 134-143.

Smith AC, Sapko MJ [1996]. Prevention of spontaneous combustion fires in U.S. coal mines. In: Proceedings of the QCO/ DME Coal Industry Safety Conference. Yeppoon, Queensland, Australia: pp. 119-126.

Spencer ER, Kovscek PD, Fields KG [1996]. Design and demonstration of a continuous dust control parameter monitoring system. In: Proceedings of Longwall USA. Pittsburgh, PA: pp. 121-132.

Steiner LJ, Turin FC, Cornelius KM [1997]. A method for evaluating system interactions in a dynamic work environment. In: Das B, Karwoski W, eds. Advances in Occupational Ergonomics and Safety II. IOS Press and Ohmsha: pp. 603-606.

Summers, C. A., and R. D. Doepker [1995]. A Comparison of the Chemistry and Mineralogy of Selected Tailings: Physical and Dissolution Characteristics. Chapter 5 in New Remediation Technology in the Changing Environmental Arena: Proceedings of 1995 SME/AIME Annual Meeting and Exhibit (Denver, CO, March 6-9, 1995). Pp. 35-43.

Taylor CD, Kovscek PD, Thimons ED [1995]. Monitoring machine-mounted dust scrubber performance. In: Wala AM, ed. Proceedings of the Seventh U.S. Mine Ventilation Symposium. Chapter 63. Lexington, KY: University of Kentucky, pp. 419-422.

Taylor CD, Kovscek PD, Thimons ED [1996]. Monitoring air flow through a machine-mounted dust scrubber. Appl Occupational and Environmental Hyg *11*(7):813-816.

Taylor CD, Rider JP, Thimons ED [1996]. Changes in face methane concentrations using high capacity scrubbers with exhausting and blowing ventilation. Soc Min Eng preprint 96-167.

Taylor CD, Goodman GVR [1997]. Use of methane monitors for estimating face gas conditions. Appl Occupational and Environmental Hyg *12*(12):947-951.

Taylor CD, Rider JP, Thimons ED [1997]. Impact of unbalanced intake and scrubber flows on face methane concentrations. In: Ramani RV, ed. Proceedings of the 6th International Mine Ventilation Congress. Chapter 27. Society for Mining, Metallurgy, and Exploration, Inc.: Littleton, CO, pp. 169-172.

Timko RJ, Derick RL [1995]. Predicting spontaneous heating in coal mine pillars. In: Wala AM, ed. Proceedings of the

Seventh U.S. Mine Ventilation Symposium. Chapter 27. Lexington, KY: University of Kentucky.

Tuchman RJ [1995]. Dr. Holmes inducted into American mining hall of fame. Holmes Safety Association Bulletin Jan:13-14.

Tuchman RJ [1998]. USBM health and safety legacy continues under NIOSH. Itasca, IL: National Safety Council, Safety Focus *May-June*:20.

Unger RL, Conway K [1995]. Impact of maintainability design on injury rates and maintenance costs for underground mining equipment. Holmes Safety Association Bulletin *Feb*:3-15.

Unger RL [1996]. A PC based ergonomic analysis software package for underground mining equipment. In: Thompson SD, Grayson RL, Wang YJ, eds. Proceedings of the Fifth Conference on the Use of Computers in the Coal Industry. Morgantown, WV: West Virginia University, pp. 83-91.

Unger RL [1996]. Tips for safer mining equipment. Holmes Safety Association Bulletin Oct: 14-15.

Unger RL [1997]. A PC-based visibility analysis software package for underground mining equipment. In: Dhar BB, Bhowmick BC, eds. Proceedings of the 27th International Conference of Safety in Mines Research Institutes. Vol. 2. New Delhi, India: Oxford & IBH Publishing Co. Pvt. Ltd., pp. 983-993.

Unger RL, Cornelius KM, Turin FC [1997]. Hazards associated with roof drilling and bolt installation in underground coal mines [Abstract]. In: Abstracts - National Occupational Injury Research Symposium '97. Morgantown, WV: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, pp. 31-32.

Vaught C, Mallett LG, Fowkes RS, Conti RS, Wiehagen WJ [1997]. Underground mine fire preparedness—Part 2 of 4: Preparedness to evacuate and miners' experiences with incipient fires. Falls Church, VA: U.S. Department of Labor, Mine Safety and Health Administration, Holmes Safety Association Bulletin *July*:1-4.

Vaught C, Mallett LG, Kowalski KM, Brnich MJ Jr. [1997]. Worker responses to realistic evacuation training. In: Proceedings of The International Emergency Management Society (TIEMS) Conference 1997, Copenhagen, Denmark: pp. 55-62.

Vaught C [1998]. Training for emergency communication: the communication triangle [Abstract]. In: Damberger HH, Godwin P, eds. Proceedings of the Illinois Mining Institute Annual Meeting - 1997. Champaign, IL: Illinois Mining Institute, pp. 44-46.

Volkwein JC, Mucho TP, Bhatt SK [1995]. Safety, technological, and productivity potentials of highwall mining. Holmes Safety Association Bulletin *Jan*:4-11.

Volkwein JC [1997]. Control and monitoring of gas in blind auger headings. In: Ramani RV, ed. Proceedings of the 6th International Mine Ventilation Congress. Chapter 26. Society for Mining, Metallurgy, and Exploration, Inc.: Littleton, CO, pp. 165-168.

Weiss ES, Slivensky WA, Schultz MJ, Stephan CR [1997]. Evaluation of water trap designs and alternative mine seal construction materials. In: Dhar BB, Bhowmick BC, eds. Proceedings of the 27th International Conference of Safety in Mines Research Institutes. Vol. 2. New Delhi, India: Oxford & IBH Publishing Co. Pvt. Ltd., pp. 973-981.

Welsh JH [1997]. Enabling technologies for reduced-exposure mining [Abstract]. In: Abstracts - National Occupational Injury Research Symposium '97. Morgantown, WV: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, p. 61.

White, Brian G. [1998]. New Tricks for an Old Elephant: Revising Concepts of Coeur d'Alene Geology. *Mining Engineering*, vol. 50, no. 8, Aug. 1998, pp. 27-35.

Whyatt JK, White BG, Blake W [1995]. Structural stress and concentration of mining-induced seismicity. Soc Min Eng preprint 95-162.

Whyatt, J. K., T. J. Williams, W. Blake, K. Sprenke, and C. Wideman [1996]. Mining-Induced Seismic Events at the Lucky Friday Mine: Large Seismic Events (Magnitude >2.5), 1989-1994. Report prepared for Lawrence Livermore National Laboratory (Memo. of Agree. B291533). Aug. 1996, 165 pp.

Whyatt JK, Blake W, Williams TJ [1996]. Classification of large seismic events at the Lucky Friday Mine. In: Ozdemir L, Hanna K, Haramy KY, Peng S, eds. Proceedings of the 15th International Conference on Ground Control in Mining. Golden, CO: Colorado School of Mines, pp. 253-268.

Whyatt JK, White BG [1997]. Stratigraphic subunits and control of ground in the Revett Formation, Coeur d'Alene Mining District, Idaho. Proceedings of the 36th U.S. Rock Mechanics Symposium. New York, NY: Columbia University, paper No. 332.

Whyatt JK, White BG, Blake W [1997]. Structural stress and concentration of mining-induced seismicity. Trans SME, Vol. 300, pp. 74-82.

Whyatt, J. K., W. Blake, and T. J. Williams [1998]. Classification of Large Seismic Events at Lucky Friday Mine. *Transactions of the Institution of Mining and Metallurgy* (Section A: Mining Industry). V. 106, Sept.-Dec. 1997, pp. A148-A162.

Whyatt, J. K., and B. G. White [1998]. Rock Bursting and Seismicity During Ramp Development, Lucky Friday Mine, Mullan, Idaho. Paper in *Proceedings*, 17th International Conference on Ground Control in Mining, ed. by Syd S. Peng (Univ. of WV, Morgantown, WV, Aug. 4-6, 1998). 1998, pp. 317-325.

Wiehagen WJ, Lineberry GT, Rethi LL [1996]. The workcrew performance model: a method for defining and building upon the expertise within an experienced work force. Trans Soc Min Eng, Vol. 298, pp. 1925-1931.

Wiehagen WJ, Conti RS, Vaught C, Fowkes RS, Brnich MJ Jr. [1997]. Underground mine fire preparedness—Part 3 of 4: Underground fire-fighting experiences and workers' perceptions of training and readiness for fire-fighting. Falls Church, VA: U.S. Department of Labor, Mine Safety and Health Administration, Holmes Safety Association Bulletin *Aug*:3-7.

Wiehagen WJ, Fowkes RS, Vaught C, Conti RS, Fotta BA [1997]. Underground mine fire preparedness—Part 1 of 4: Study overview and perspective of underground mine fires. Falls Church, VA: U.S. Department of Labor, Mine Safety and Health Administration, Holmes Safety Association Bulletin *May-June*:14-19.

Wiehagen WJ, Lineberry GT, Lacefield WE, Brnich MJ Jr., Rethi LL [1997]. The work crew performance model: a method for' evaluating training and performance in the mining industry [Abstract]. In: Abstracts - National Occupational Injury Research Symposium '97. Morgantown, WV: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, pp. 39-40.

Wieland MS [1995]. Detecting cross-hole wave interactions and charge malfunctions in underground shots. In: Proceedings of the Annual Symposium on Explosives Blasting Research. Cleveland, OH: Society of Explosive Engineers, pp. 62-75.

Wieland MS [1996]. Three laboratory tests for explosive ruggedness. In: Proceedings of the Annual Symposium on Explosives Blasting Research. Cleveland, OH: Society of Explosive Engineers, pp. 165-178.

Wieland MS [1997]. Reduced explosive-mass and damaged detonator performance tests. In: Proceedings of the 13th Annual Symposium on Explosives and Blasting Research. International Society of Explosives Engineers: pp. 211-221.

Wieland MS [1997]. Understanding toxic fumes from mining explosives. In: Proceedings of the Blasting Analysis International, Inc., Seventh High-Tech Seminar, pp. 93-108.

Wieland MS [1998]. Understanding the hazard potentials of toxic fumes. In: Proceedings of the Eighth High-Tech Seminar: Blasting Technology, Instrumentation and Explosives Applications. Allentown, PA: Blasting Analysis International, Inc., pp. 363-382.

Wieland MS [1998]. Work principle for predicting explosive toxic fumes. In: Proceedings of the 14th Annual Symposium on Explosives and Blasting Research. International Society of Explosives Engineers: pp. 121-135.

Williams KL, Vinson RP [1996]. A new technology for respirable coal mine dust measurement. Appl Occupational and Environmental Hyg *11*(7):618-623.

Wirch SJ, Jankowski RA [1995]. Shearer-mounted scrubbers, are they viable and cost-effective? In: Wala AM, ed. Proceedings of the Seventh U.S. Mine Ventilation Symposium. Chapter 49. Lexington, KY: University of Kentucky.

Wuest WJ, DeMarco MJ, Mark C [1996]. Review of applications of the coal-mine roof rating (CMRR) for ground-control planning and operations. Mining Engineering *48*(7):49-55. Yenchek MR, Schuster KC, Hudson AJ [1995]. Operational characteristics of trailing cable splices. In: Proceedings of the 1995 IEEE Industry Applications Society 30th Annual Meeting. Vol. 3. Orlando, FL: pp. 1993-1999.

Yenchek MR, Cole GP [1997]. Thermal modeling of portable power cables. IEEE Transactions on Industry Applications 33(1)72-79.

Yenchek MR, Hudson AJ [1998]. A passive means to detect hot trolley insulators. SME preprint 98-16. Littleton, CO: Society for Mining, Metallurgy, and Exploration, Inc.

Zelanko JC, Mucho TP, Compton CS, Long LE, Bailey PE [1995]. Parameters affecting cable bolt performance: results of in situ evaluations. In: Peng SS, ed. Proceedings of the 14th International Conference on Ground Control in Mining. Morgantown, WV: West Virginia University.

Zipf RK Jr., Mark C [1996]. Design methods to control violent pillar failures in room-and-pillar mines. In: Ozdemir L, Hanna K, Haramy KY, Peng S, eds. Proceedings of the 15th International Conference on Ground Control. Golden, CO: Colorado School of Mines, pp. 571-585.

Zlochower IA [1996]. Inerting hydrocarbon fuels with halon alternatives. In: Proceedings of the Halon Options Technical Working Conference. Albuquerque, NM: pp. 367-375.

#### NIOSH NUMBERED PUBLICATIONS

95-106 - Criteria for a Recommended Standard Occupational Exposure To Respirable Coal Mine Dust

95-120 - When A Coal Miner Dies... The National Coal Workers' Autopsy Study

96-112 - NIOSH Alert - Request for Assistance in Preventing Silicosis and Deaths in Construction Workers

96-120 - NIOSH Warns of Silicosis Risks in Construction, Suggests Measures to Reduce Exposure

96-136 - NIOSH Technical Report Results from the National Occupational Health Survey of Mining (NOHSM)

97-101 - Construction Workers: It's Not Just!... Prevent Silicosis

97-112 - Silicosis - It's Not Just Dust, Protect Your Lungs from Deadly Silicosis (Poster)

97-118 - Silica...It's Not Just Dust, Silica Dust Causes Silicosis - What rock drillers can do to protect their lungs from silica dust 97-120 - Distinguishing motor starts from short circuits through phase-angle measurements

97-122 - Proceedings: New technology for ground control in retreat mining

97-123 - Detection of downed trolley lines using arc signature analysis

97-126 - A second-generation remote optical methanometer.

97-127 - Evaluation of a signaling and warning system for underground mines

97-134 - Development of a mine hoist and ore pass research facility

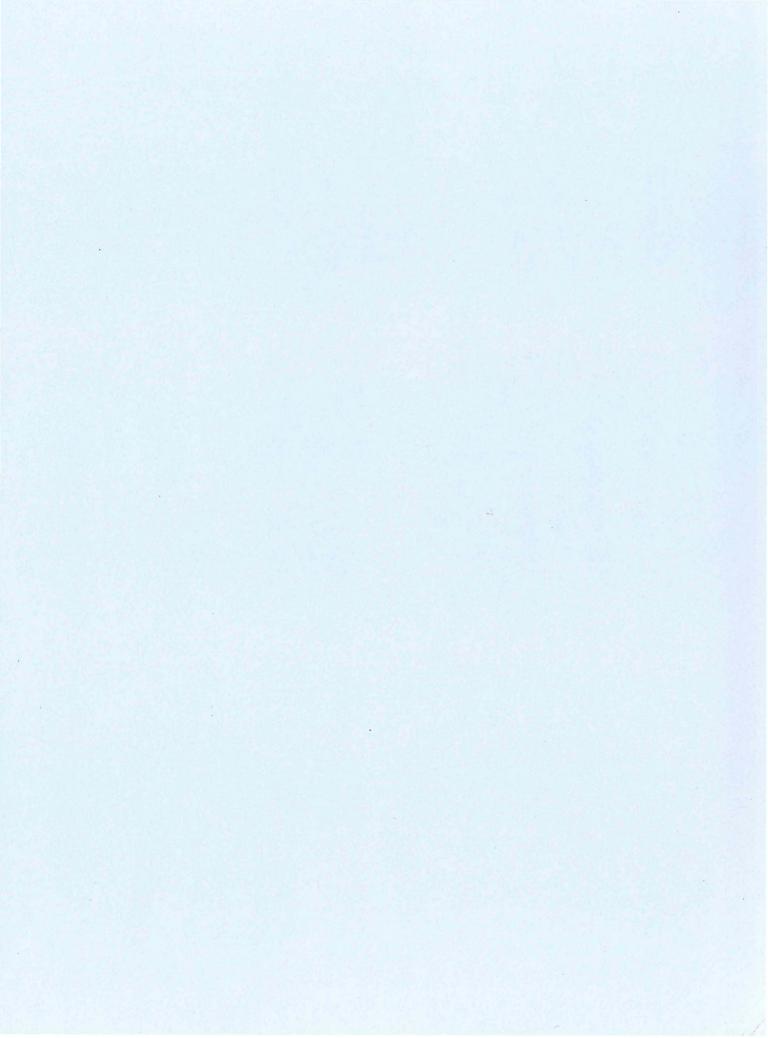
97-147 - Hazard ID Exposure to Silica Dust on Continuous Mining Operations Using Flooded-Bed Scrubbers

98-101 - Accurate navigation and control of continuous mining machines for coal mining

98-104 - Effects of mining height on injury rates in U.S. underground nonlongwall bituminous coal mines 98-114 - NIOSH program of mining research: a summary of mining research in progress, 1998. Pittsburgh, PA: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health.

,





OHHS (NIOSH) Publication No. 99-102