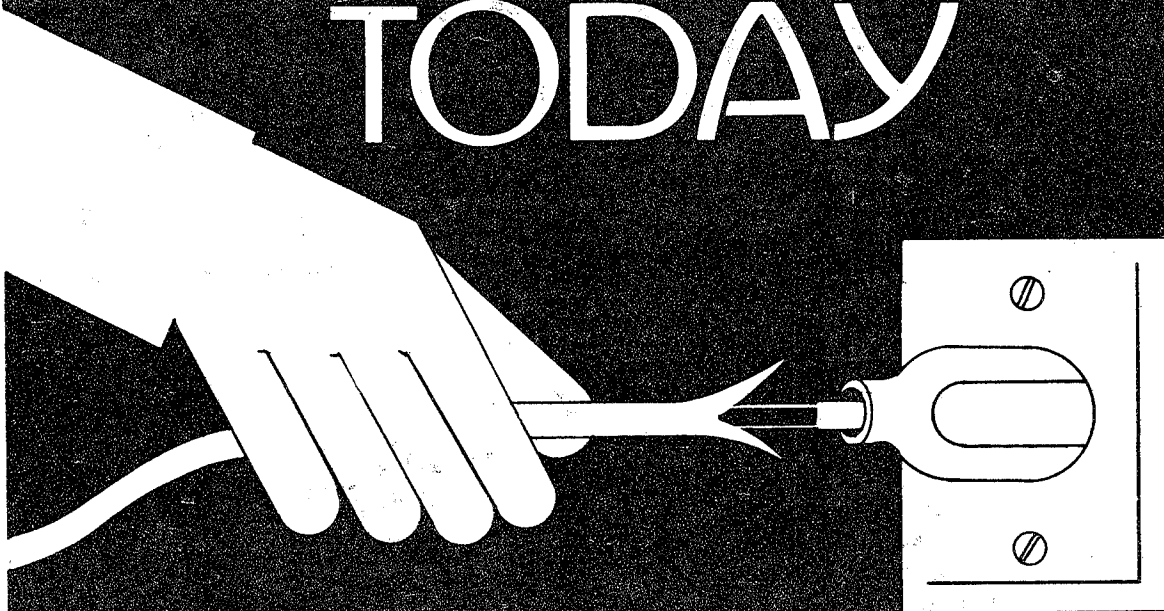

BULLETIN

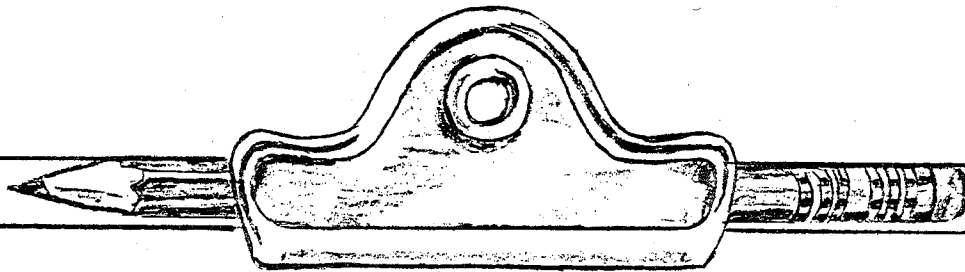


TODAY



TOMORROW

Replace defective Equipment Today!



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THIS SAFETY BULLETIN CONTAINING SAFETY ARTICLES ON A VARIETY OF SUBJECTS, FATAL ACCIDENT ABSTRACTS, STUDIES, POSTERS AND OTHER SAFETY INFORMATION FOR PRESENTATION TO GROUPS OF MINE AND PLANT WORKERS IS PROVIDED FREE AS A BASIS FOR DISCUSSION AT ON-THE-JOB SAFETY MEETINGS.

PLEASE USE THE POSTAGE-PAID ENCLOSED GREEN MEETING REPORT FORM AND RETURN TO THE HOLMES SAFETY ASSOCIATION.

March 1988



<u>COMPANY</u>	<u>CHAPTER NO.</u>	<u>LOCATION</u>
Thurman Coal Co., Inc.	7468	Rupert, WV
Hopewood Mining Co., Inc.	7469	Pikeville, KY
Martin County Coal Corp.	7470	Pilgrim, KY
Martin County Coal Corp.	7471	Pilgrim, KY
Martin County Coal Corp.	7472	Pilgrim, KY
Martin County Coal Corp.	7473	Pilgrim, KY
Benafuel Inc.	7474	Herndon, WV
Hopeful Coal Company	7475	Elkhorn City, KY
Lucky Dollar Coal Co., Inc.	7476	Shelby Gap, KY
Inferno Coals Inc.	7477	Regina, KY
G and R.S. Coal Co., Inc.	7478	Elkhorn City, KY
B & K Coal	7479	Johnstown, PA
Danville Dredge	7480	Danville, PA
F & S Coal	7481	Trevorton, PA
Strata Trenching Service Inc.	7482	Albion, PA
Yogi Mining Co., Inc. No. 4 Mine	7483	Grundy, VA
North Central Coal Co.	7484	Clarksburg, WV
Lilly Brook Coal Company	7485	Egeria, WV
Tanner Co.	7486	Tucson, AZ
Lowlands Coal Corp.	7487	MacDunn, WV
Mountain Top Coal Company	7488	Williamstown, PA
R. S. & W. Coal Company	7489	Pottsville, PA
S & S Anthracite Inc.	7490	Williamstown, PA
Mine Training Service	7491	Cabin Creek, WV
Hawks Nest Mining Co.	7492	Elkridge, WV
Nesquehoning Coal Company	7493	Nesquehoning, PA
Magnet Coal Inc.	7494	Myrtle, WV
Mattaponi Sand & Gravel Co., Inc.	7495	Aylett, VA
Holbrook & Mining Co., Inc.	7496	McDowell, KY
EDCO Energy Corporation	7497	Manton, KY
Jaco Mining Co., Inc.	7498	Banner, KY
Jaco Mining Co., Inc.	7499	Harold, KY
Jaco Mining Co., Inc.	7500	Pike, KY

H.S.A. SAFETY TOPIC



Electrical Accidents Relating to Grounding Systems at Surface and Underground Metal/Nonmetal Mines ¹

During a five year period, 80 accidents were reported including five fatalities, that were attributed to either a faulty grounding system, or the complete lack of a grounding system. The data for this analysis were obtained from accident reports on file at the Health and Safety Analysis Center, Lakewood, Colorado.

ANALYSIS

The accidentally energized frame of a piece of equipment or a pipe or other metallic item, thought to be at ground potential is a more serious hazard than a bare energized wire. Caution is usually used around a bare wire until it is proven to be energized or not. However, accidentally energized frames and structures usually catch the victim unaware.

Typical of this hazard is described in the report of the fatal accident that occurred when a foreman attempted to ascend an energized metal ladder on a screening plant. Power to the plant was supplied by an ungrounded wye electrical system. One phase conductor to a motor-starter box made contact with the screening plant frame, thereby energizing the frame. The foreman completed the circuit's path to earth when he touched the ladder.

Another fatality occurred when a front-end loader operator completed the circuit between a conveyor and a hopper, each of which had a separate phase-to-ground fault (double line-to-ground). Although both phases were connected to a grounding system, the system was not properly maintained. The two separate ground faults, which normally would have interrupted the system, exposed the victim to a phase-to-phase potential of 480 volts.

Another example of an improperly maintained ground system is illustrated by the following. The ungrounded portion of a severed ground wire became energized by a damaged powerline which resulted in a fatality. Failure to detect the faulty continuity of the ground wire contributed to the accident.

Numerous nonfatal accidents have occurred from similar circumstances as these related to the fatalities. A plant foreman was temporarily disabled when he touched a pipeline energized by a shorted powerline. A faulty battery charger energized a truck frame resulting in a shock. Injuries resulted from the following: (1) a phase to case short in a grease gun, a grinder, two impact wrenches, two vibrators and three drills. Each of these accidents occurred because the

¹/ Electrical Engineer, Division of Special Studies, Health and Safety Analysis Center

tools were improperly grounded. (2) Seven motors (three in submersible pumps) incurred phase-to-ground faults and resulted in lost time injuries because of the lack of grounding.

The difference between a fatal and nonfatal accident is dependent upon the amount of current through the victim and the length of time of the current flow. Any of these accidents could have been fatalities if the circumstances had been ideal.

CONCLUSIONS

There were 385 electrical accidents reported in a five year period that resulted in shock, electrocution, or electrical burns. Of these, 80 (20.78 percent) involved faulty grounding systems, i.e., high impedance, open ground wires, etc. Since not all incidents involving shock incidents are reportable, it is reasonable to assume that more accidents have occurred from these sources than is indicated by the available data. The ability to eliminate fatalities or reduce the severity of an electrical accident often is limited by the quality of the grounding system and a properly set ground fault device. The data indicate that grounding systems, where used, are not being tested on a regular basis to detect deterioration or a malfunctioning system. If equipment frames, waterlines and grounding wires, normally considered to be grounded, become energized, it can be assumed that the grounding system is not functioning and that periodic system testing has not been done. The lack of a grounding system is more hazardous than one that is deteriorating. Most of the accidents could have been prevented if a well designed grounding system were installed and maintained.

Maintaining the integrity of the ground circuit is of paramount importance for safe operation of electrical equipment. Flexing of cables can result in the grounding wires breaking and ground wires are often accidentally cut by machinery. Deterioration of the grounding system occurs at mechanical tie points where the grounding conductor connects to the earth ground or at equipment frames and conductor enclosures. This is particularly true where the connections are exposed to the mine environment or the weather. For these reasons periodic tests should be performed on the grounding system.

RECOMMENDATIONS

All electrical systems should be equipped with a safety grounding system designed to restrict the voltage level which a person may be subjected to under fault conditions. The faults considered should be line-to-ground faults on grounded systems and double line-to-ground on ungrounded systems. The installation of ground fault and short-circuit protection will reduce these hazards.

All stationary, portable and mobile equipment should have a safety grounding conductor connected to their frames. Plugs, receptacles and couplers installed on this equipment should allow for separation of power conductors before the grounding conductor. The metal frames of these disconnecting devices should be connected to the grounding conductor or insulated from the cable. The installation of a ground continuity monitor will provide early detection of a discontinuity in the safety grounding wires.

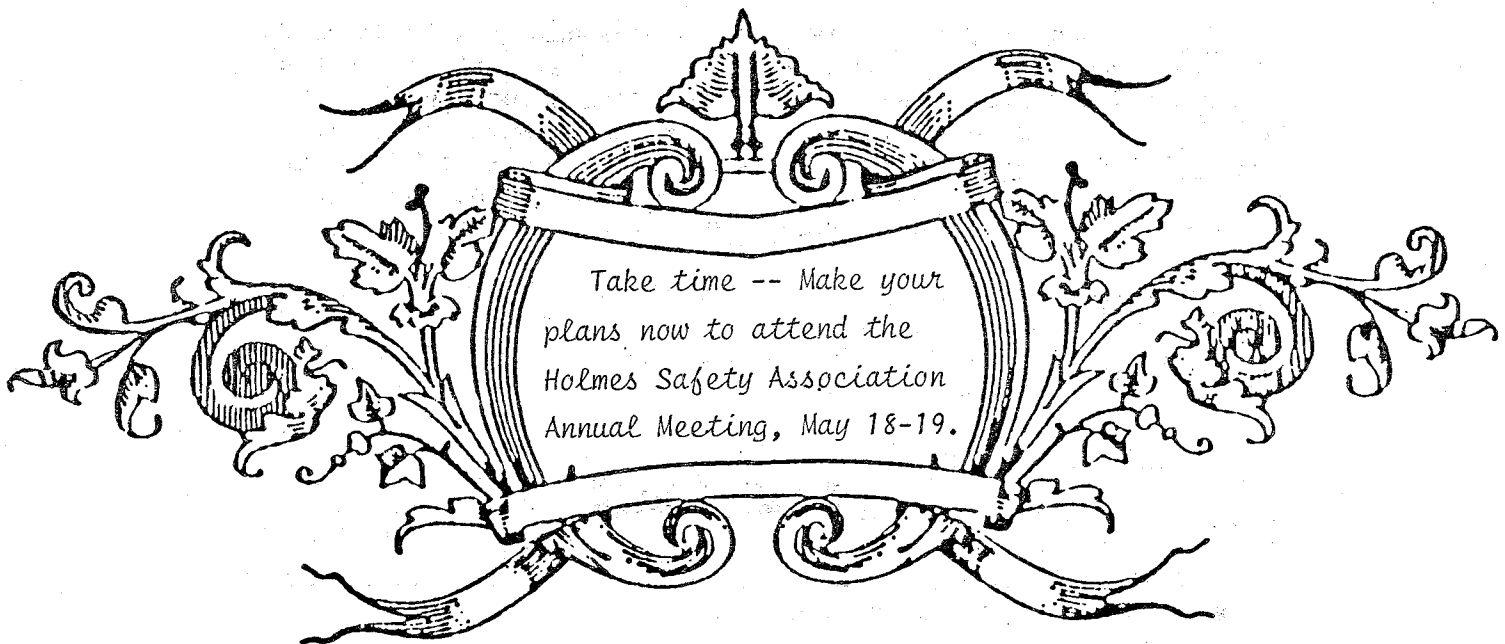
Battery operated equipment should have their frames connected to the battery charger safety grounding system during charging operations.

Remote loads of portable or mobile generators should have safety grounding conductors connected between the load and generator frame.

Hand-held electric equipment should have exposed metallic parts connected to the safety grounding system, unless it is battery operated or is approved as being double-insulated by agencies such as the Underwriter's Laboratory.

On direct current equipment, the safety grounding conductor should be connected between the frames of the equipment and the grounded point of the direct current power source.

Testing of the grounding system should be done upon installation, and when repairs or modifications are made to the grounding system. Testing should include continuity tests, resistance tests at the connection point to earth, and for large voltage sources (500 kilovolt amperes or larger) tests for impedance and maximum fault current flow into the system. The complete safety grounding system should be tested on a regular basis, preferably at least annually.





FREQUENCY ZERO—The Winning Edge

When District Councils and their chapter members enthusiastically **CONTRIBUTE**, rather than simply "FUNCTION", in safety they become partners in a **FREQUENCY ZERO** campaign.

FREQUENCY ZERO is an employee Chapter-Council motivation plan which includes a specific safety awareness campaign that is simply outlined in a safety program. Because of its motivational format, employee involvement in accident prevention can be applied to other areas of performance as well. Attitudes and practices that make for a safer, healthier employee are often the same as those that lead to improved communications, teamwork and productivity.

It's also a great opportunity to meld your efforts more closely with other chapters and councils in your district area and the entire association.

How does the **FREQUENCY ZERO PROGRAM** work? The chapters and district councils taking part in it are virtually an unlimited resource in terms of energy and initiative. Becoming involved in this program, you'll be discovering new ways to reduce accidents, cut costs and operate more efficiently through improved employee chapter and district council meetings.

HERE'S HOW —

1. **ENTHUSIASM** - The **FREQUENCY ZERO PROGRAM** centers around the idea of employees in the chapters and district councils being involved in a competitive safety program.
2. **GOALS** - The simple fact is that communications will go a long way toward getting employees to focus their efforts on the chapter and district councils incidence rate standings. At the same time, you'll make employees more knowledgeable and careful about safety regulations, requirements and other aspects of their work. Having a common goal will also unify and bind them closer together and create a noticeable standing in the final results.
3. **MOTIVATION** - Providing incentives and offering national safety awards and recognition for desired safety records should motivate employees within the chapters and district councils to contribute rather than simply function on their jobs.
4. **TEAM SPIRIT** - Showing employees within their chapters and district councils how they can form the winning edge for their chapter and council can be an effective way to build team spirit. By centering on the group of chapters under the district council as well as individual results, you can link people together across industry operations into a joint effort that works.

5. **SELF-ESTEEM** - Besides promoting general team spirit, the target **FREQUENCY ZERO** will help employees realize that each of them is important to the overall effort. The recognition and approval that you give them will renew their own self esteem as well as define their role in the overall safety competition.
6. **MEASUREMENT** - As you continuously monitor progress toward this goal, and periodically post the results, you'll sustain emphasis on that goal. Follow-through will help generate momentum.
7. **RECOGNITION** - No matter what chapter or district council level, everyone needs recognition. While the actual incentives and awards will be appealing, the manner in which they are presented and the sincere feelings behind them are what really gives them value.

What role in the safety awards program do the officers of the chapter and district councils play? While you are seeking to motivate and involve your members in the program, the first person to motivate is yourself. As chapter and district council officers, your leadership must always prevail.

PROVIDE FOLLOW UP-

MEASURE PROGRESS - Another critical step. At intervals throughout campaign, measure improvement and distribute information -- standings. Recognition is important - if merited, have top management sign and send messages of their own. Informally congratulate those in the lead and encourage others.

FOLLOW UP

SUSTAIN ENTHUSIASM - There will be lag periods in the momentum of the campaign. Keep emphasis on the program and its objectives visible. The key is focusing on people. Keep in touch with them and listen to feedback.

FOLLOW UP

WRAP IT UP - Public recognition of the councils and chapters achievement is as important as the award itself.

FOLLOW UP

Generous thanks and congratulations should go to everyone involved. Stress the value of their combined efforts to the district and national council.

FINALLY

PRESENTATIONS should be performed by the highest level of management and before the largest possible group. Always maintain a motivational/educational, people-oriented approach to all problems in your chapter and district council safety meetings.

Notice to Members:

Are all of your mines Chapter members?
If not, complete this application and
have all of your mines on the mailing
list to receive Bulletins and decals.

March 1988

W. H. Hoover
National Secretary



Chapter No. _____

Mail application to:

U.S. Department of Labor
Mine Safety and Health Administration
Holmes Safety Association
4800 Forbes Avenue
Pittsburgh, Pennsylvania 15213

Telephone: 412-621-4500 Ext. 650

Application is hereby made for the admission to the Holmes Safety Association
of the _____ Safety Chapter,
established at _____
(Town) (County) (State)
on _____, 19__.

Nonaffiliated or affiliated with _____
Holmes Safety Association State or District Council.

Membership (No. of persons) _____ Product _____

Mining operations: Underground _____ Surface _____ Plant _____ Mill _____ Other _____

Chapter meetings will be held _____ of each month.
(Time) (Day)

Chapter Officers

(Please print or type name and address of the following):

President _____

Vice President _____

Secretary-Treasurer _____

Safety Director _____

Name, address, and telephone No.
of company _____

Name and mailing address of mine _____

Mail charter to: _____

ASSISTED IN FORMATION:

(Management)

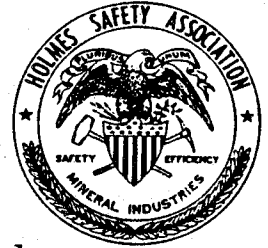
(MSHA) _____

(State) _____
Signature
(President of Chapter)

WINTER ALERT

ABSTRACT FROM FATAL ACCIDENT

*This fatality could be discussed at your regular on-the-job safety meeting.



FATAL FALL OF ROOF ACCIDENT

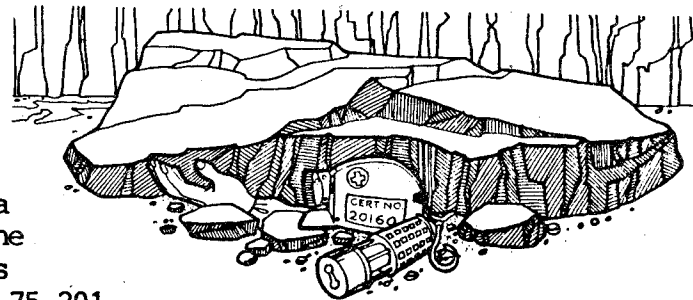
GENERAL INFORMATION: A fall of roof occurred in the working place of the No. 2 entry resulting in the death of a continuous-miner helper.

DESCRIPTION OF ACCIDENT: The section crew and face foreman entered the mine and traveled to the working section. Five shuttle cars of coal were mined out of the second outby crosscut between Nos. 2 and 1 entries, after which the continuous-mining machine was trammed into the last crosscut between Nos. 2 and 1 entries. A normal advance of production was completed in this crosscut and the continuous miner was trammed back from the working face. Roof bolting in the second outby crosscut could not be completed because the roof-bolting machine had encountered problems; however, after checking with the foreman, the continuous-miner operator was instructed to mine from the face of No. 2 entry. Initially, the face of No. 2 entry was flush with the rib line of the last crosscut. The continuous-miner operator advanced the left side (sump cut) approximately 12 feet, he trammed the miner out and two safety posts were installed in the sump cut. During this same time, repairs were completed to the roof-bolting machine and it was moved to the last crosscut outby the face of No. 2 entry. The roof-bolter helper and the roof bolter began to set safety jacks in the working face of the last crosscut.

Both the face foreman and the continuous-miner operator examined the working place and found no unsafe conditions. The slab cut was then advanced even with the sump cut. The right rib in the No. 2 entry at the outby corner was then mined to provide a wide travelway into the No. 2 entry from the crosscut to No. 3 entry. After the corner was cut and the working place was cleaned up, the continuous-miner operator began tramping the continuous miner out of the No. 2 entry when the roof fell without any prior warning pinning the continuous-miner operator helper.

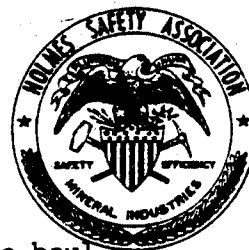
FINDINGS OF FACT: 1. The victim for some undetermined reason, advanced inby the last permanent roof support, a violation of 30 CFR Section 75.200.

2. The mining method followed exposed the miners to unusual danger from roof falls caused by excessive widths; in that, the right corner of the No. 2 entry was removed after the face of No. 2 entry was advanced 12 feet, and a visible slip (defect) in the roof of the crosscut approximately 36 feet away was present, a violation of 30 CFR Section 75.201.



ABSTRACT FROM FATAL ACCIDENT

*This fatality could be discussed at your regular on-the-job safety meeting.



FATAL POWERED HAULAGE ACCIDENT

GENERAL INFORMATION: A haulage accident occurred on the mine haul road approximately 1 mile from the company's No. 1 strip mine pit. The accident resulted in the death of a self-employed truck driver who had approximately 10 years experience as a haul truck operator.

DESCRIPTION OF ACCIDENT: Normal work activities proceeded with the truck driver hauling loads of coal to the railroad loading dock. On his second trip, apparently he became aware of an unusual noise from underneath the rear of the truck. He stopped on a descending grade, put the transmission in reverse position and turned the ignition switch off. He positioned himself under the truck to inspect the rear drive shaft. Apparently the drive shaft fell off the front universal joint and the truck began moving forward crushing him. The truck then continued down the haulage road a distance of approximately 51 feet before going over the embankment.

FINDINGS OF FACT: The truck was left unattended and the brakes were not set, nor were the wheels turned into a bank or berm after the truck was parked on a grade—a violation of 30 CFR Section 77.1607(n).

FATAL MACHINERY ACCIDENT

GENERAL INFORMATION: A dozer operator was fatally injured when the Model D-7 Caterpillar dozer he was operating backed over the edge of a bank. He had a total of two years of mining experience.

DESCRIPTION OF ACCIDENT: The usual work continued above the bank which involved the D-7 dozer assisting in the loading of the scraper by pushing it over the clay overburden. While the scraper traveled to the area designated for deposit, the dozer operator would prepare the clay overburden site for the scraper's next load.

As the scraper operator was returning from the stockpile area, the loader operator at the crushing plant stated that he noticed the D-7 dozer lying below the bank on its left side. Arriving at the site, he found the dozer still running with the operator lying under the dozer.

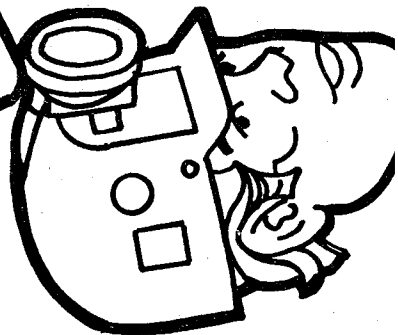
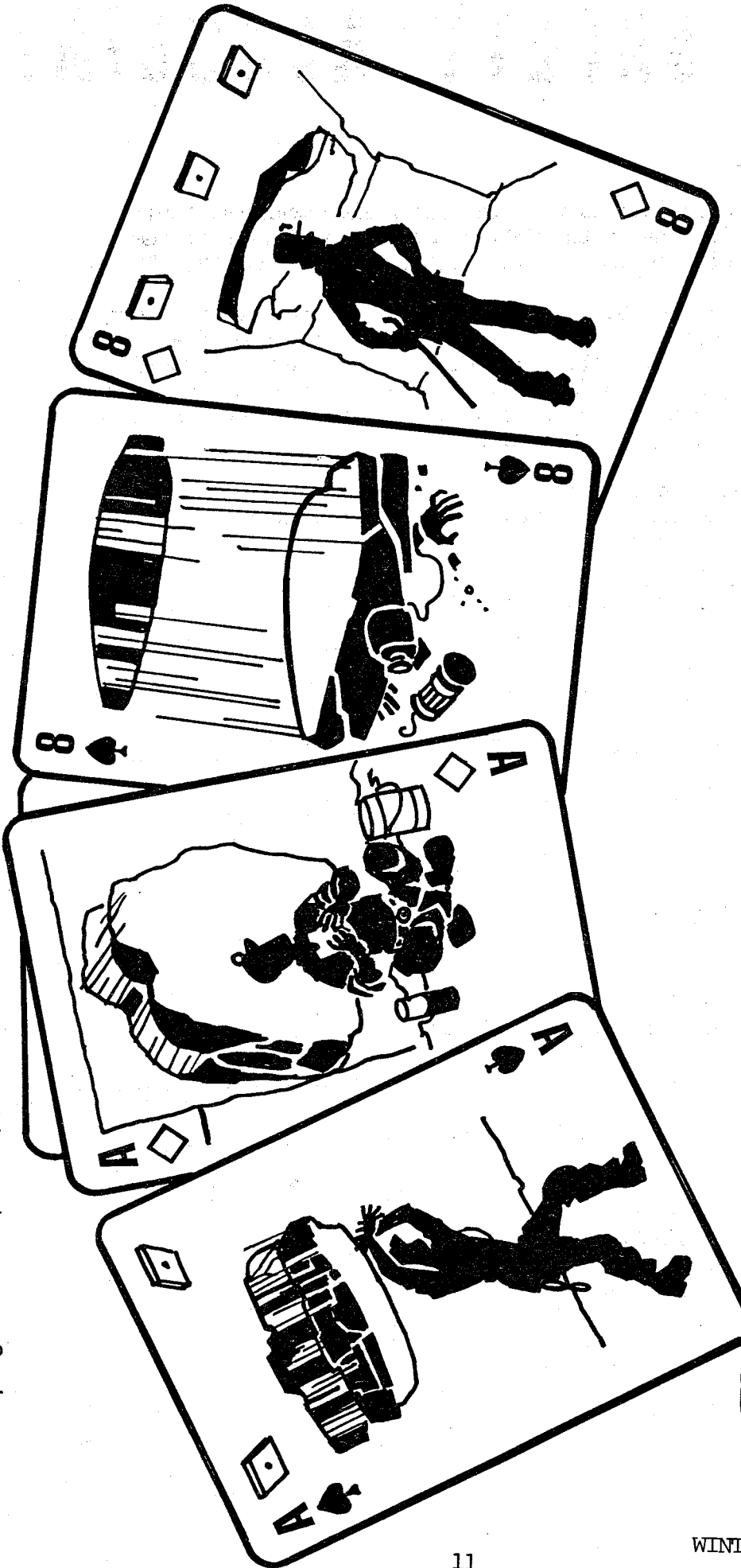
Inspection of the accident scene showed dozer tracks which indicated that the dozer was apparently backblading toward the edge of the bank in a northwest direction and backed over it. An examination of the D-7 dozer revealed that it was not equipped with rollover protection or a seatbelt.

CAUSE OF ACCIDENT: The direct cause of this accident could not be determined with complete certainty due to the absence of any eyewitnesses. The most probable cause may have been the inattention of the operator in the performance of his duties as a dozer operator. Contributing to the seriousness of the accident was the fact that the dozer was not equipped with rollover protection and a seatbelt.



Roof Evaluation — Accident Prevention

R.E.A.P. — a program developed to promote health and safety awareness in mining



Don't deal yourself a losing hand

STAY UNDER SUPPORTED ROOF!

March 1988

HOLMES SAFETY ASSOCIATION

Dear Members,

You are cordially invited to join your fellow members, their families and friends of the Holmes Safety Association at the National Council meeting in Evansville, Indiana, May 19, 1988.

A bus tour sponsored by Peabody Coal Co. and the National Council will be available free to guests. If you ever wondered what mining or mining research is all about, this is one tour you shouldn't pass up, so plan now to join your friends. Arrangements are easy to make; just complete the bottom of the registration form so that we can reserve a seat on the bus.

This tour is unique because it includes an interesting combination of stops ranging from the Squaw Creek Open Pit Mining Operation to the Rockport Energy Center.

VIRTUALLY EVERYTHING IS TAKEN CARE OF FOR YOU.

You will be accompanied by a friendly and courteous tour Director. It will be a shame to pass up a chance to get a closer look at the mining and mineral industry operations.

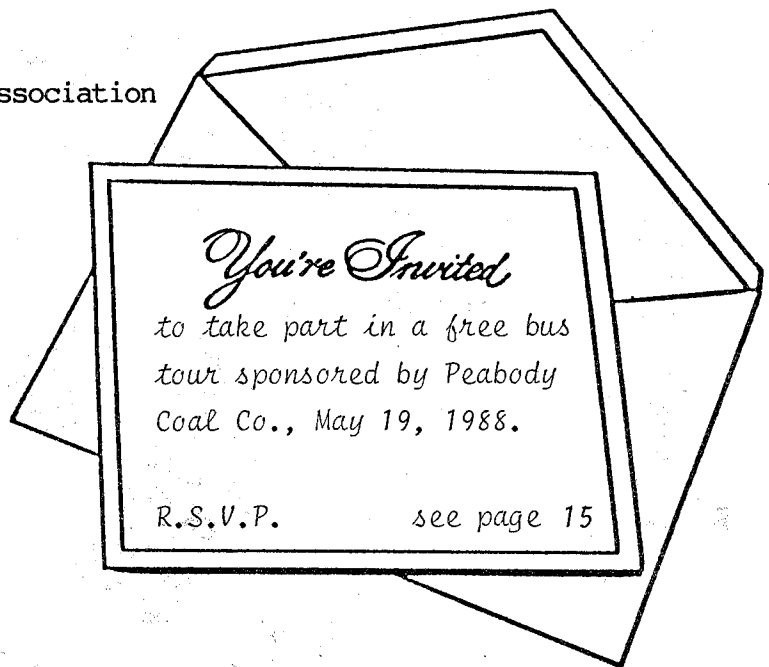
THE NUMBER OF TRAVELERS IS LIMITED -- MAKE SURE YOU'RE INCLUDED.

We're looking forward to your visit to the Holmes Safety Association National Council Meeting, May 18-19, 1988.

Sincerely,



James Clem, President
National Council, Holmes Safety Association



HOLMES SAFETY ASSOCIATION

AGENDA FOR HOLMES SAFETY ASSOCIATION

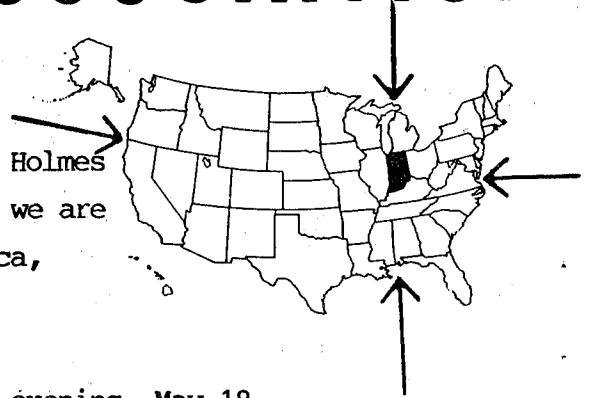
AND JOSEPH A. HOLMES ANNUAL MEETINGS

- MAY 18 - WEDNESDAY
 REGISTRATION -- SHERATON INN-AIRPORT
 5:00 P.M. - 8:00 P.M. COCKTAIL HOUR-HOST BAR/AIRLINE ROOM
- MAY 19 - THURSDAY
 9:00 A.M. - BUS TOUR FOR SPOUSES AND GUESTS LEAVES HOTEL
 (VISIT TO WILDERNESS AREA) SQUAW CREEK MINE
 IN BOONVILLE AND ROCKPORT ENERGY INFORMATION
 CENTER) (LUNCH AVAILABLE).
- 9:00 A.M. - HOLMES SAFETY ASSOCIATION EXECUTIVE MEETING/
 AIRLINE ROOM
- 9:45 A.M. - COFFEE BREAK
- 10:00 A.M. - HOLMES SAFETY ASSOCIATION REGULAR MEETING/
 AIRLINE ROOM
 OPENING REMARKS -- PRESIDENT JAMES CLEM
 -- SECRETARY WILLIAM HOOVER
 COMMITTEE REPORTS
 AWARD PRESENTATIONS
 ELECTION OF OFFICERS
 STATE AND DISTRICT COUNCIL REPORTS
 OLD BUSINESS
 NEW BUSINESS
 COMMITTEE APPOINTMENTS
- 12:15 P.M. - ADJOURNMENT
- 12:15 P.M. - 2:00 P.M. - LUNCH
- 2:00 P.M. - JOSEPH A. HOLMES BOARD OF DIRECTORS
 MEETING/AIRLINE ROOM
- 2:45 P.M. - BREAK
- 3:00 P.M. - JOSEPH A. HOLMES REGULAR MEETING/AIRLINE ROOM
- 4:00 P.M. - ADJOURNMENT
- 4:00 P.M. - TOUR BUS RETURNS TO HOTEL
- 4:30 P.M. - 6:30 P.M. - COCKTAIL HOUR-HOST BAR/AIRLINE ROOM
- 6:30 P.M. - SAFETY AWARDS BANQUET/AIRLINE ROOM
 BUFFET DINNER
 DISTRICT COUNCIL COMPETITION AWARDS
 CHAPTER FORMATION AWARDS
 DOOR PRIZES

March 1988

HOLMES SAFETY ASSOCIATION

MAKE PLANS NOW—to attend the Holmes Safety Association Annual meeting. This year we are holding our meeting in the heartland of America, southwest Indiana.



There will be a host social hour on Wednesday evening, May 18, beginning at 5 p.m. The meetings will begin on Thursday, May 19, with the executive committee meeting at 9 a.m. and the regular meeting of the body at 10 a.m. The Joseph A. Holmes Safety Association will hold its meeting at 2 p.m. that afternoon. Thursday evening will feature a social hour beginning at 4:30 followed by the safety awards banquet at 6:30.

National Council president James Clem extends a warm welcome to all members to attend this meeting. He is looking forward to a good turnout from the various companies and district councils in Indiana, Illinois and Kentucky.

We have a block of rooms available at the Sheraton Inn Evansville Airport, 5701 U.S. Highway 41 North, Evansville, Indiana, (812-464-1010). Please make reservations early.



HOLMES SAFETY ASSOCIATION and
JOSEPH A. HOLMES SAFETY ASSOCIATION
ANNUAL MEETINGS
EVANSVILLE, INDIANA
MAY 18-19, 1988

ROOM RESERVATION:*

Sheraton Inn located at Evansville Airport--Special Convention Rate of:
\$34 - Single () No. of Rooms Required ()
\$39 - Double () No. of Rooms Required ()

Arrival Date _____ Departure Date _____

***ROOM PAYMENTS DUE ON DEPARTURE AT HOTEL DESK.**

Buffet Dinner Featuring: Garden Salad, Baked ham, Roast Beef au Jus,
Turkey w/dressing, Broccoli Spears w/sauce,
Carrots Vichy, Whipped Potatoes, Dessert,
Coffee and Tea.

No. of Banquet Tickets @ \$16.00 (including tax and gratuity) _____ *

***PAYMENT OF BANQUET TICKETS MUST ACCOMPANY REQUEST.** Make checks
payable to William H. Hoover, National Treasurer, HSA.

Name (please print) _____ Phone _____

Title _____

Representing _____

Address _____

City _____ State _____ Zip Code _____

Please return reservation no later than May 6 to:

MSHA, Holmes Safety Association
4800 Forbes Avenue
Pittsburgh, Pennsylvania 15213

The President of the National Council, James Clem, has finalized
arrangements for a tour on May 19 sponsored by Peabody Coal Co. and the
HSA National Council. Departing the hotel by bus at 9 a.m., the tour
includes a visit to a wilderness area (a reclaimed strip mine), the
Squaw Creek Mine (an operating strip mine) in Boonville and the
Rockport Energy Information Center (lunch will be available). The
tour will conclude back at the hotel at 4 p.m. This is one trip you do
not want to miss. The tour will be free of charge, but seats are
limited; please make plans and return this form as soon as possible.

Please reserve _____ (#) seats on bus tour.

HOW MINING COMPANIES USE THE SAFETY BULLETIN

Many mining companies use the safety bulletin topics and fatal abstracts in conducting on the job safety meetings. The topics lend themselves to safety training, miner training, and task training.

Following are accolades from various mining companies that utilize this material in their safety meetings and training programs:

"I want to thank you for the great statistics on accidents. It was of great value to me in preparing the company's annual safety speech I gave at our annual meeting. Thanks again, keep up the good work."

Dynatec Mining Contractors

"Please make a note of thanks to your people. We use your bulletin for our safety meetings each week. Thank you."

Quartzite Stone Co., Inc.

"This is one of the best bulletins on safety I have read. I mean the best."

S & V Stone Quarry

"We have enjoyed the bulletin. The work you have put into it really shows and has helped us think and work with the idea that accidents don't just happen."

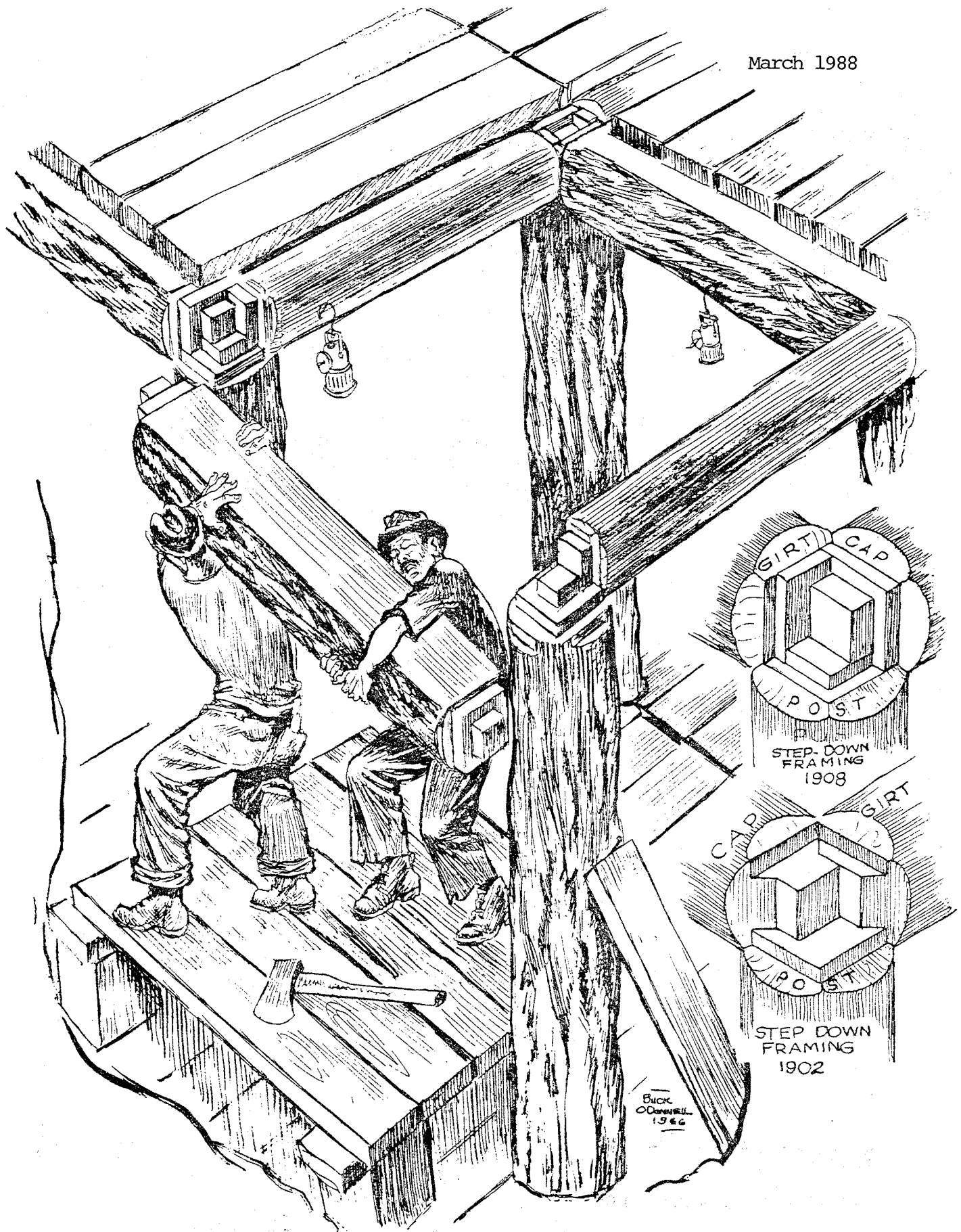
Collinson Sand & Gravel

"Your monthly bulletins are very helpful in organization of refresher classes and monthly safety tips."

Belfry Coal Corporation

"We would like to take another opportunity and thank all of you nice people for all the good, rich material and fine safety lessons. All of this material is put to good use."

McCoy Elkhorn Corporation



SQUARE SET TIMBERING

The square set method of timbering was created by Phillip Deidesheimer, Superintendent of the Ophir Mine on the Comstock Lode of Nevada in 1861. Variations of the framing were developed. The step-down framing with post, cap, and girt found wide acceptance in mining.



H.S.A. SAFETY TOPIC



COUNCIL NEWS

The following outline is just an example of an operational cost divided equally among Chapter members.

EXAMPLE

EXAMPLE

EXAMPLE

EXPENSE DURING THE CALENDAR YEAR
John Doe District Council

Taking into consideration the average cost of operating the Council of the Holmes Safety Association, we estimate that \$450.00 will cover the expense during the calendar year--therefore, on a pro-rate basis, based on the number of employees at the participating mines, we have arrived at the following:

<u>Name of Company</u>	<u>Mine</u>	<u>Employees</u>	<u>Rate per Employee</u>	<u>Amount</u>
Apple Coal Company	Apple	15	.1548	\$ 2.32
Orange Coal Company	Orange	108	.1548	16.72
Pear Coal Company	Sage	442	.1548	68.42
Grape Coal Company	Edward	120	.1548	18.58
Lemon Coal Company	Source	625	.1548	96.75
Lime Coal Company	Lime	182	.1548	28.17
Watermelon Inc. (Coal)	Kool	315	.1548	48.76
Honeydew Steel Corp.	Max 4	86	.1548	13.31
Cantaloupe Electric	Switch	269	.1548	41.64
Woodland Iron Comp.	No. 4	20	.1548	3.10
Black Diamond Fuel Co. (Coal)	No. 1	265	.1548	41.02
Savage By-Product	Pepper	460	.1548	71.21
TOTAL		2,907		\$450.00

The above is submitted for your consideration.

/s/ Name
Treasurer, John Doe Council

Cost ÷ Total Members = Rate Per Employee

HOLMES SAFETY ASSOCIATION

"JOINT EFFORTS YIELDING RESULTS"

During 1986, Mine Safety and Health Specialists from industry, labor and the Mine Safety and Health Administration's District 3 Office joined in a cooperative effort to reduce causes of injuries and violations in coal mines. The objective of the **Repeat Violation Reduction Program (RVRP)** is to identify root causes of violations and to come up with long-term ways of correcting unsafe situations.

Significant decreases in hazardous practices, conditions, and health and safety violations have occurred in 1987 at several of the mines actively participating in the program. For example:

1. A large Ohio coal mine employing approximately 550 people went 9 months with only one permissibility violation. This mine has eight continuous-mining sections and two longwalls.
2. A coal mine located in West Virginia employing approximately 200 people went 6 months with no permissibility violations. This mine has five continuous-mining sections and one longwall.
3. One company in District 3 with 5 underground coal mines and 2 surface mines producing 12.1 million tons in 1987, reported a 41 percent reduction in orders and a 10.2 percent reduction in citations issued at their operations.

The **Repeat Violation Reduction Program** encourages regular and structured meetings of MSHA, company and union representatives to openly discuss the "hows" and "whys" of mining conditions and practices resulting in violations of safety and health requirements. Innovative ideas, aimed at eliminating the root causes of problems, have resulted from this cooperative effort. One operator designed what he terms as an "anti-violation belt drive." Others have developed new methods of handling and distributing supplies to their underground sections which have resulted in a 66 percent reduction of injuries resulting from handling materials for one operator.

Another significant step being taken is the development of tailor-made training plans, those plans that meet the needs of the mine, from information gathered from the **RVRP**.

Information on the **Repeat Violation Reduction Program** can be obtained from MSHA's District 3 Office by calling (304) 291-4277.

March 1988

JANUARY -

DECEMBER

	Electrical	Explosives and breaking agents	Falling, rolling or sliding rock or material	Fall of face, rib, side or highwall	Fall of roof	Powered haulage	Ignition/explos. of gas or dust	Machinery	Other	Total
ALABAMA			1							2
ALASKA										
ARIZONA										
ARKANSAS										
COLORADO				1*			1✓			2
GEORGIA										
ILLINOIS					1					1
INDIANA	1*					1				2
IOWA										
KANSAS										
KENTUCKY	3*	1		1	12	11		2		30
MARYLAND										
MISSOURI										
MONTANA								2		2
NEW MEXICO										
NORTH DAKOTA										
OHIO								1	1*	2
OKLAHOMA										
PENNSYLVANIA					1	4		1		6
TENNESSEE					1	2				3
TEXAS										
UTAH										
VIRGINIA		1		1			1*✓			3
WASHINGTON										
WEST VIRGINIA	2			1	3	3		2		11
WYOMING										
TOTALS	6	2	1	4	18	21	2	9	1	64

✓ denotes chargeback

* denotes contractor

1987 Metal/
Nonmetal
Fatalities

JANUARY -
DECEMBER

March 1988

	Electrical	Falling, or rolling, or sliding rock or material	Fall of face, rib side or highwall	Nonpowered haulage	Powered haulage	Hoisting	Inundation	Machinery	Slip or fall of person	Total
Alabama	1							2		3
Alaska								1		1
Arizona	1	1			1			1		7
Arkansas	1	1	2		1					5
California					3			3	1	7
Colorado	1		1							2
Connecticut										
Delaware										
Florida					1					1
Georgia								1	1	2
Hawaii										
Idaho			1			1				2
Illinois					1			1	1	3
Indiana										
Iowa										
Kansas	1				1			1		3
Kentucky										
Louisiana				1						1
Maine										
Maryland										
Massachusetts								1		1
Michigan					2					2
Minnesota		1								1
Mississippi										
Missouri										
Montana					1			1		2
Nebraska	1	1			1					3
Nevada										
New Hampshire										
New Jersey					1					1
New Mexico								1		1
New York					1					1
North Carolina										
North Dakota										
Ohio									1	1
Oklahoma					1					1
Oregon										
Pennsylvania		1								1
Puerto Rico	1									1
Rhode Island										
South Carolina								1		1
South Dakota								1		1
Tennessee							1			1
Texas	2				2					4
Utah	1							1		2
Vermont								1		1
Virgin Islands										
Virginia								1		1
Washington		2								2
West Virginia										
Wisconsin					1					1
Wyoming										
TOTAL	10	7	4	1	21	1	1	18	4	67



WE CAN'T BRING THEM BACK

The following are brief descriptions of a few 1987 Underground and Surface Coal mine fatal accidents. There is a lesson to be learned in each accident. Take time out to review at your safety meetings:

1. **MACHINERY:**

A mechanic was fatally injured when the unblocked discharge conveyor boom of a continuous-mining machine fell and crushed him. The victim and another maintenance man were attempting to replace a hydraulic hose. The boom had been raised to permit access to the hose. Neither the machine operator nor the two maintenance men blocked the boom. While attempting to feed the repaired hose through an access opening, the boom raise/lower control lever was apparently contacted and the boom fell. Fatal Case #5

2. **SLIP OR FALL OF PERSON:**

A miner was fatally injured when he slipped and fell into an ore dump. The victim was dumping a train of ore cars when the third car in the train hung up on two rocks wedged between the double track and the Granby frame. The victim apparently reached or jumped up to turn the spray system off and slipped off the edge of the open dump. He fell approximately 60 feet to the level of the ore below. Fatal Case #7

3. **MACHINERY:**

An electrician was fatally injured when he was pulled into a conveyor belt tail pulley. The victim and another electrician were sent to check why the conveyor belt was not running. It was discovered that a rock was wedged in the self-cleaning tail pulley. The system was locked out and the takeup pulleys were released. The victim crawled onto the return side of the belt and attempted to knock the rock loose with a sledgehammer. When the rock was dislodged, the tension on the load side of the conveyor released and the victim was drawn into the tail pulley. Fatal Case # 8

4. **FALL OF MATERIAL**

A construction contractor foreman died 13 days after being struck by falling concrete blocks and sand while taking down a material storage silo. The victim ordered his work crew to remove the steel stabilizers that supported the top five rows of concrete blocks of the silo wall. In doing so, he violated instructions from the general superintendent which specified that only two rows of blocks were to have the stabilizers removed at any one time. He was working outside the silo close to the wall when it collapsed outward and buried him. Fatal Case #12

5. SLIP OR FALL OF PERSON:

A miner was killed after falling approximately 50 feet down an open stope. He had been awaiting his partner who was lighting fuses in a loaded stope. They were to light fuses in a nearby stope and exit the area together. The victim, for reasons unknown, left the designated meeting place and fell down an open stope. The victim apparently fell into the barricaded open stope prior to the blast.

Fatal Case #13

6. FALL OF ROOF OR BACK (Rockburst):

While barring loose ground from the back, a miner was killed when a rockburst occurred in the stope where he and his partner were working. The victim was buried under approximately three feet of material and his partner was covered to mid-thigh.

Fatal Case #15

7. FALL OF ROOF OR BACK:

A miner was killed when he was struck by a rock which fell from the back. The victim had been observing ground conditions while standing behind his partner who was drilling a bottom hole. A rock weighing approximately 150 pounds fell from 18 feet above and struck the victim on his hard hat. The two men had been working under known unstable roof conditions without the aid of roof support.

Fatal Case #17

"NEWS YOU CAN USE"



THE HOLMES SAFETY ASSOCIATION 1988
SLOGAN DECAL, **ACCIDENTS:**
IS AVAILABLE
IN LIMITED
SUPPLY,



Reduce the Rate in '88

PLEASE REQUEST FROM:

AUDREY WILLIAMS
HOLMES SAFETY ASSOCIATION
4800 FORBES AVENUE
PITTSBURGH, PA 15213
PHONE: (412) 621-4500 EXT. 649/650

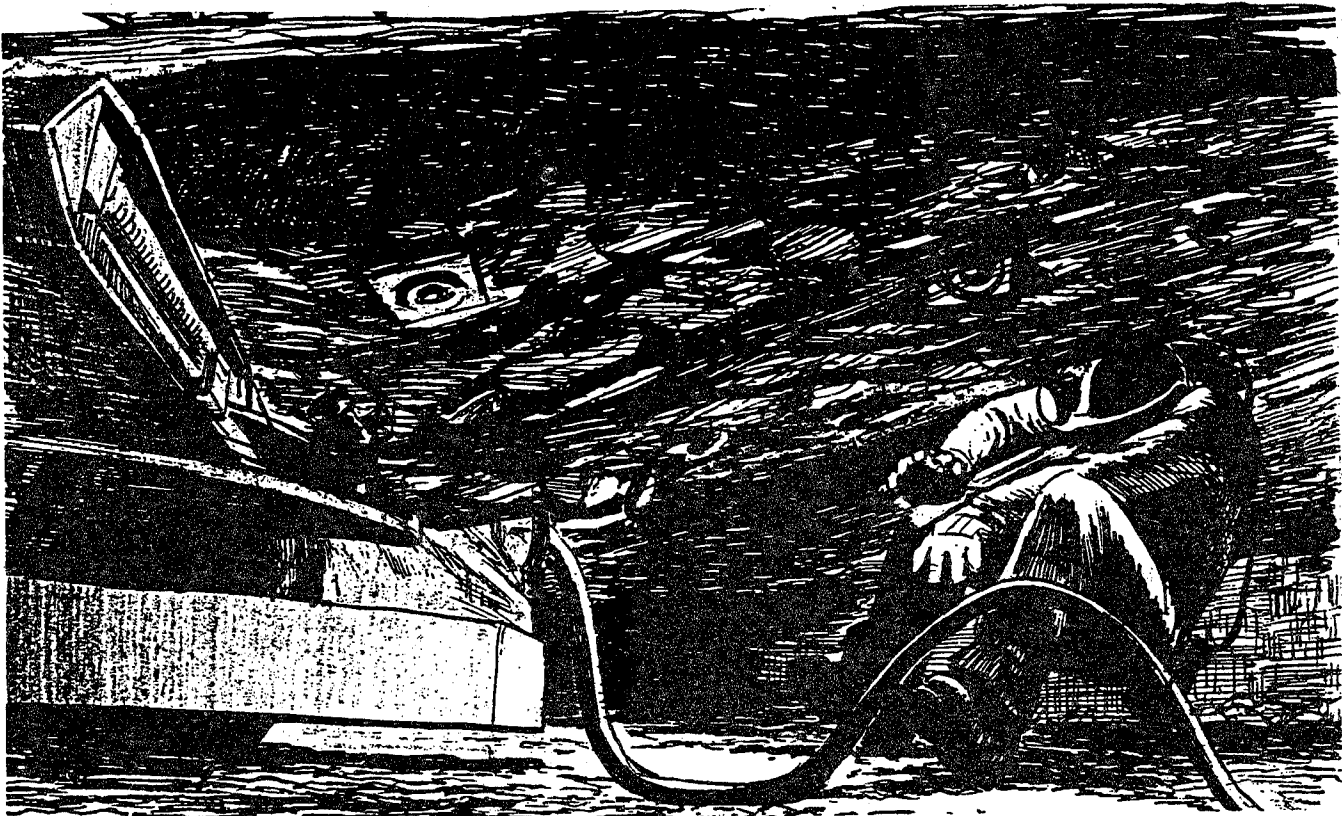
WINTER ALERT

Hazard Alert



U.S. Department of Labor
 Mine Safety and Health Administration
 Safety and Health Technology Center

FATAL ROOF AND RIB FALLS -COAL- 1986 vs 1987



<u>STATE</u>	<u>1986</u>	<u>1987</u>	<u>OCCUPATION</u>	<u>1986</u>	<u>1987</u>
KENTUCKY	3	13	ROOF BOLTER OP/HELPER	9	9
W. VIRGINIA	7	4	CONT. MINER OP/HELPER	4	5
ILLINOIS	4	1	FOREMAN/SUPV./OWNER	10	2
PENNSYLVANIA (ANTH.)	2	-	JACKSETTER/TIMBERMAN	1	1
(BIT.)	1	1	BELT/CONVEYOR MAN	-	1
VIRGINIA	7	-	SCOOP OPERATOR	-	1
ALABAMA	1	-	LABORER/UTIL./MINER	1	-
COLORADO	1	-	MECHANIC/ELECTRICIAN	1	-
UTAH	2	-	SHOT FIRER/DRILLER	1	-
			SERVICE REP	1	-



H.S.A. SAFETY TOPIC

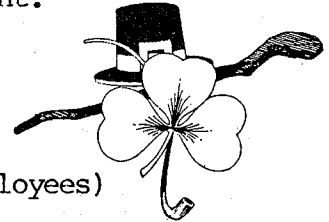


COUNCIL NEWS

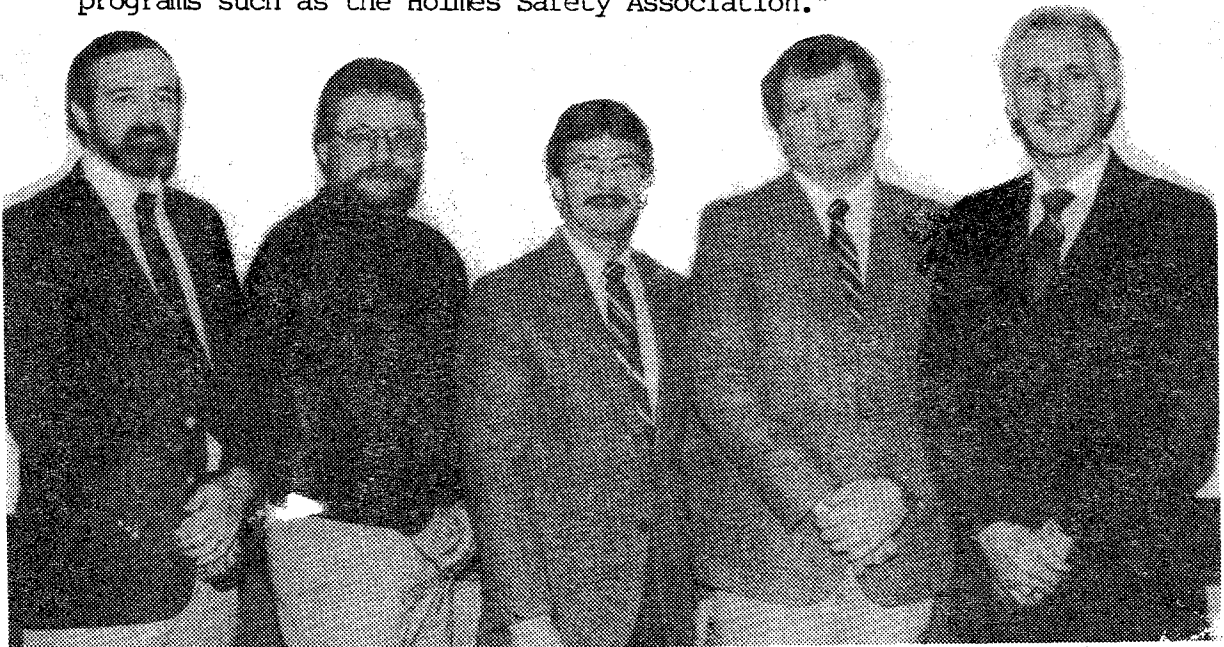
The Coal River District Council, Madison, West Virginia, held a safety awards banquet January 9 to recognize mining facilities in six categories with the lowest incidence rates.

The winners were:

- | | |
|----------------------------------|--|
| <u>SURFACE FACILITY</u> -- | Hobet Mining and Construction Co. Inc.
Hobet No. 79 Preparation Plant. |
| <u>STRIP OPERATION</u> -- | Colony Bay Coal Co.
Colony Bay Surface Mine |
| <u>UNDERGROUND OPERATIONS</u> -- | Westmoreland Coal Co.
Hampton No. 3 Mine (0-49 employees)
Cannelton Industries, Inc.
No. 1 Mine (50-99 employees)
BethEnergy Mines Inc.
No. 132 Mine (100-149 employees)
Peabody Coal Co.
Robinhood No. 8 Mine (150+ employees) |



Bart Lay Jr., Deputy Director/West Virginia Dept. of Energy, and President of the West Virginia State Council told the 118 present that 1987 had the lowest number of mine related deaths ever for the coal industry in West Virginia. He credited "the employees and management working together for safety and ... safety programs such as the Holmes Safety Association."



Officers of the Coal River Council, Holmes Safety Association for 1988 are, from left: James Walker, secretary; Jack Hatfield, Jr., first vice president; Ronald Lorrison, president; Steve Richards, third vice president; and Ivan Puckett, second vice president. Not pictured is Kenny Salier, safety director. The association sponsored a Safety Awards Banquet last Saturday evening at the Veterans Memorial Building in Madison

WINTER ALERT

March 1988

HOLMES SAFETY ASSOCIATION
FIFTH ANNUAL WEST VIRGINIA STATE COUNCIL MEETING - 1988
National Mine Health and Safety Academy
Box 1166 - Airport Road
Beckley, West Virginia 25802-1166
304-256-3313

REGISTRATION FORM	
NAME _____	Phone _____
REPRESENTING _____	/**
(Company/Agency)	(Mine / Local Council)
Address _____	**Mileage one-way home to meeting site _____
(HSA District Council)	
<input type="checkbox"/> Number Tickets.....	Amount Enclosed <input type="text" value="\$.00"/>
Banquet Reservations @ \$9.00 per person.	
* <u>Must be received not later than April 1, 1988</u>	
Make Checks Payable to : <u>West Virginia Holmes Safety Assoc.</u>	
Mail Registration to : Don Farley or Naomi Hughes	
National Mining Academy	
Phone : 304-256-3313	Box 1166
Naomi Hughes	Beckley, WV 25802-1166

* Full refund for cancellations on or before April 8, 1988.
 No refunds can be given after that date.

** Needed to determine awards for District Council and Mine with the largest representation at the State Meeting.

L A D I E S take note : Special Door Prizes for the Ladies in attendance at the Banquet Session.

B A N Q U E T M E N U : All-you-can-eat Salad Bar and
 Choice of Hot Roast Beef, Breaded Veal Steak or Turkey
 Green Beans, Mashed Potatoes and Gravy, Dessert
 Rolls, Butter, Coffee, Tea, Soft Drinks, Etc.

L O D G I N G : Room and board at \$38.00 per person will be available at the Academy. Reservations may be made by contacting Naomi Hughes, 304-256-3313 at the Academy. Lodging at the Academy will be available only from 1:00 PM on April 15 to 11:00 AM on April 17 for this meeting.

Belt buckles at \$5.00 each and hats for \$5.00 each will also be available for purchase. The proceeds go toward the support of the State Council Meeting. This year's design is dedicated to the National Secretary, William H. (Bill) Hoover, for his 30+ years of support and service in promoting safer and healthier mines and miners. They are going fast. Contact your local MSHA office to get one of these limited editions. Should there be any left, we will be selling those at the State Meeting, but I wouldn't count on that happening.

Special activities are planned for Saturday Afternoon.

S E E A G E N D A O N R E V E R S E S I D E

FRIDAY - April 15, 1988

March 1988

Participants Registration3:00 - 8:00 PM
 Industry Recognitions and Nominations
 for the Coal Safety Leader Award.....6:30 - 8:30 PM
 Door Prize Drawing.....Conclusion of Program
 Social Hour.....8:30 - 9:30 PM

SATURDAY - APRIL 16, 1988

Participants Registration.....8:00-10:00AM

SESSION I10:00 AM

Moderator.....Bart Lay, jr. WV HSA President
 Invocation.....Grant King, Chaplain
 Guests Introduction...Francis Nickler, Vice President
 Keynote Speaker.....Jerry Spicer, Administrator CMS&H
 Mine Safety and Health Admin.
 Secretary's Report....Roger Hurd, WV HSA Secretary
 Beth-Energy Corporation
 Treasurer's Report....Lonnie Gore, WV HSA Treasurer
 Marrowbone Development Corp.
 Old Business
 New Business (Nomination of Officers 1988-90)
 Pacesetter Awards.....Ronald L. Keaton, District Manager
 MSHA District 3, Morgantown, WV.
 Pacesetter Awards.....J.M. Krese, District Manager
 MSHA District 4, Mt. Hope, WV.

DOOR PRIZE DRAWINGS.....11:30 AM
 Recess for lunch

SESSION II.....1:00 - 5:00 PM

Films in Auditorium, Organized Recreation in Gymnasium,
 Academy Tours, Shopping Center Tours, *Golf Outing (if the
 weather permits), Audio-Hearing Tests, VISIT VENDOR DISPLAYS

SOCIAL HOUR4:00-5:00 PM

SESSION III.....(BANQUET).....5:30 PM

ModeratorTerry Osborne, WV HSA Vice Pres
 District 31 UMWA
 Blessing of the Meal.....Aaron Justice, MSHA Dist. 3
 Dinner and Fellowship
 Speaker IntroductionFrancis Nickler, WV HSA Vice Pres
 Island Creek Coal Co.
 Banquet Speaker.....James Clem, National HSA President
 Director of Safety
 Peabody Coal Company
 State Mining Awards.....Bart Lay, Jr., Div. of UG Mines
 West Virginia Depart. of Energy
 1987 Coal Safety Leader Recipient.....Bill Katney
 1988 Coal Safety Leader Presentation.....James Adkins, WV HSA
 Safety Director
 Special Presentations.....Bart Lay, Div. UG Mines Comm.
 West Virginia Dept. of Energy
 Installation of Officers.....W.H. Hoover, National Secretary
 DOOR PRIZE DRAWINGS.....8:00 PM
 BENEDICTION.....Grant King, WV HSA Chaplain

THE LAST WORD

Sometimes it takes two...

to accomplish the job.
as we see it: it's foolish
to go it alone when you
know you need help.



Take the safest way...

you'll never make a wrong
turn.
as we see it: even when the safe
route takes time and trouble,
it's always the right way to go.

Always worth following...

the safe worker is the Pied
Piper of the plant or office.
Listen to the tune.
as we see it: "Safety First" is
a refrain to be repeated.

Hop to it... Don't put it
off any longer. Start
today to do all your tasks
the safe way.

as we see it: to make a new
project child's play, work
out safe procedures before
you jump in.



Weigh the alternatives...

Don't be a lightweight by
neglecting safety rules. You
may pay a heavy price.
as we see it: there is no
heavier responsibility than
ensuring your own and your
coworkers safety.

Don't get hung up on bad habits...

You may "clothes" yourself out
of a safety award.
as we see it: safety is never out
of style.



Time for a change...

Your vacation should be
a change of pace.
It means a time of real rest
and freedom from your usual
work. It's like a safety
valve, relieving the strains
and stresses of body and
mind. Make the most of it.
as we see it: travel within
speed limits - for
safety's sake.

Drown it in... Each day,
make it a point to
remind yourself of the
safety rules you must
follow. It's a habit that
can beat out accidents.
as we see it: you can't
beat safety.

A Noteworthy Achievement...

You can be proud of a
perfect safety record.
as we see it: you can't
play it too loudly; the only
way to perform a job is the
safe way.

Let's fix it... For
safety's sake, always tag
all tools requiring repair
and never use a tool
that's not in tip-top
condition.

as we see it: to forget
repair is to ask for despair
(by having an accident!)

Reach for the top...

Scale new heights by
attaining a perfect
safety record.
as we see it: you can reach
the peak of well-being by
following good safety
practices on the job and
off.

POSTAGE AND FEES PAID
U.S. Department of Labor
LAB 441

**MSHA, Office of Holmes
Safety Association**
Educational Policy & Development
4800 Forbes Avenue, Room A268
Pittsburgh, PA 15213

5000-22

(Rev. 12-78)



**HOLMES SAFETY ASSOCIATION
MEETING REPORT FORM**

For the month of _____

TOTAL meetings held this month _____

TOTAL attendance this month _____

Chapter Number _____ (See address label, if incorrect, please indicate change.)

(Telephone No.)

(Signature)

(Title)

FILL OUT - FOLD AND STAPLE - FREE MAIL-IN

NOTE: BE SURE OUR ADDRESS SHOWS

If you do not care to receive this Bulletin, please check here and return this form.

Please include any change of address below:

Joseph A. Holmes Safety Association

Awards Criteria--Outline

Type "A" Awards - For Acts of Heroism

The awards are medals with Medal of Honor Certificate.

Type "A" - For Acts of Heroic Assistance

The awards are Certificates of Honor.

Type B-1 Awards - For Individual Workers

(40 years continuous work experience without injury that resulted in lost workdays)

The awards are Certificate of Honor, Gold Pins and Gold Decal.

Type B-2 Awards - For Individual Officials

(For record of group working under their supervision)

The awards are Certificate of Honor.

Type C Awards - For Safety Records

(For all segments of the mineral extractive industries, meeting adopted criteria)

The awards are Certificate of Honor.

Other Awards - For Individual Workers

(For 10, 20, or 30 years without injury resulting in lost workdays)

The awards are 30 years - Silver Pin and Decal, 20 years - Bronze Pin and Decal, 10 years - Decal bearing insignia.

Special Awards - For Small Operators

(Mine operators with 25 employees or less with outstanding safety records)

The awards are Certificate of Honor:

Contact: HSA Office

Department of Labor
MSHA, Holmes Safety Association
4800 Forbes Avenue
Pittsburgh, PA 15213

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COMIE

grow

**WITH
US**