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# BULLETIN

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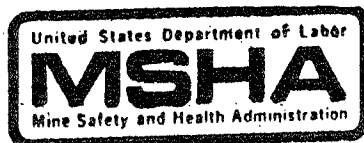
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October 1987

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HOLMES SAFETY ASSOCIATION

# NEVER TURN YOUR BACK TO DANGER





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<u>COMPANY</u>	<u>CHAPTER NO.</u>	<u>LOCATION</u>
Alleghany Equipment Co.	7310	Marlinton, WV
Carbo Ceramics Inc.	7311	Eufaula, WV
Urban Sand & Gravel	7312	Heyworth, IL
T. R. & H.	7313	Sitka, KY
Upright Coal Inc.	7314	McDowell, KY
Henry Zellmer Enterprises	7315	Granville, IL
Akers Magnetite Inc.	7316	Kenova, WV
C and D Mining Inc.	7317	Elkhorn City, KY
Tarmac Lone Star Inc.	7318	Chester, VA
Tarmac Lone Star Inc.	7319	Petersburg, VA
Tarmac Lone Star Inc.	7320	Richmond, VA
Tarmac Lone Star Inc.	7321	Richmond, VA
Tarmac Lone Star Inc.	7322	Charles City, VA
Tarmac Lone Star Inc.	7323	Richmond, VA
Tarmac Lone Star Inc.	7324	Varina, VA
Tarmac Lone Star Inc.	7325	Petersburg, VA
Chata Coal Company	7326	Elkhorn City, KY
Bear Run Strip	7327	Richwood, WV
L. H. Bossier Inc.	7328	Alexandria, LA
Mid State Sand & Gravel	7329	Alexandria, LA
Trans Sand Inc.	7330	Alexandria, LA
Mid State Materials	7331	Alexandria, LA
Diamond B Construction Co.	7332	Alexandria, LA
Southern Silica of Louisiana	7333	Alexandria, LA
United Bridge Co.	7334	Alexandria, LA
Grimlo Inc.	7335	Smithers, WV
Gibbons and Reed Co.	7336	Salt Lake, UT
Douds Stone Inc.	7337	Douds, IA
Gardner Quarry	7338	Selma, IA



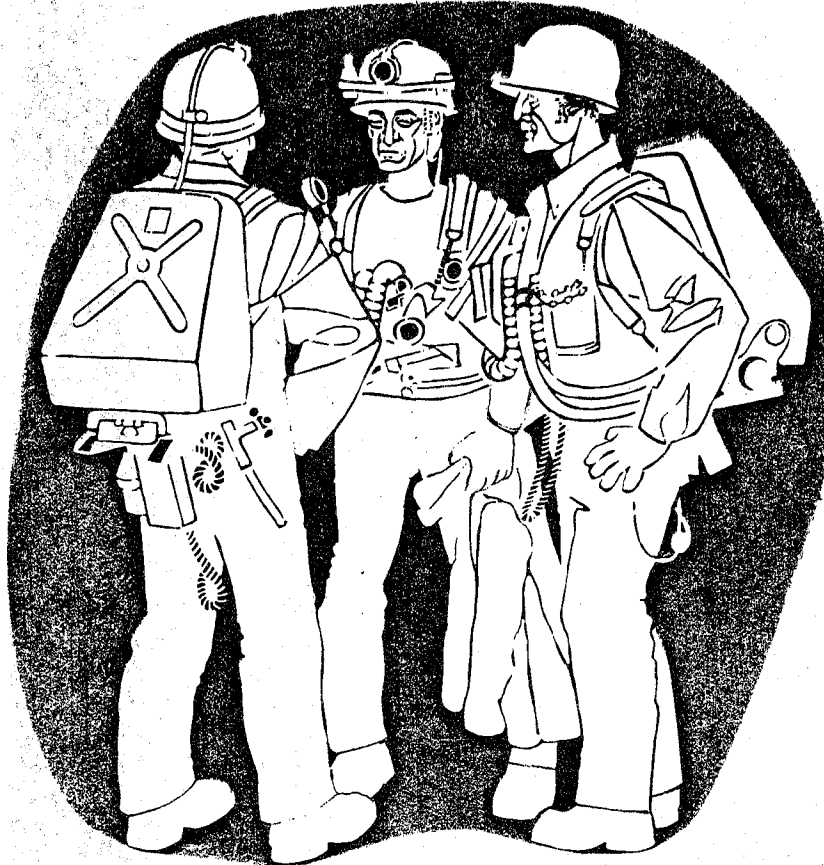
H.S.A. SAFETY TOPIC



# NAMES in the NEWS

The Florence Mining Company Rescue Team No. 2 led by Captain Dwight Hess captured first place in the 1987 Pennsylvania State Mine Rescue Contest. Florence Mining Company Rescue Team No. 1 led by Captain Gary Buckles won second place and Helvetia Coal Company Rescue Team led by Captain Tom Zack took third. The State Mine Rescue contest was sponsored by the Pennsylvania Bituminous Safety Association and held at Carmichaels High School Athletic field, Carmichaels, Pennsylvania, August 15, 1987.

The Benchman's contest was won by Tom Bochna from the Emerald Mine No. 1 Rescue Team, Emerald Mines Corporation, Waynesburg, Pennsylvania.



Hats off to the Florence Mining Company Rescue Team Nos. 1 and 2 and the Helvetia Coal Company Rescue Team.

The Association recognizes the work and time involved consolidating groups of mine rescue teams to demonstrate a most strenuous test in performance. When individual groups can be coordinated into a single working unit, there is no doubt that every team was a winner.

# HOLMES SAFETY ASSOCIATION

The following chapters have been deleted from the rolls due to economic status, being mined out or abandoned.

## Inactive Chapters deleted by State 1982-1986\*

State	1982	1983	1984	1985	1986
Alabama	14	2	2	8	1
Alaska	1	--	1	--	--
Arizona	--	--	1	8	2
Arkansas	--	--	1	2	--
California	--	--	1	1	--
Colorado	2	2	7	3	--
Connecticut	--	--	--	--	--
Delaware	--	--	--	--	--
Florida	--	--	--	2	--
Georgia	--	--	--	2	--
Hawaii	--	--	--	--	--
Idaho	--	--	--	1	--
Illinois	8	2	6	22	7
Indiana	8	--	4	8	7
Iowa	2	2	6	1	--
Kansas	--	--	1	--	1
Kentucky	15	14	60	24	67
Louisiana	--	--	2	1	2
Maine	--	--	--	--	--
Maryland	2	--	1	1	2
Massachusetts	--	--	--	1	--
Michigan	7	--	1	3	1
Minnesota	--	--	--	1	--
Mississippi	1	--	--	--	--
Missouri	2	1	2	--	1
Montana	--	--	1	--	--
Nebraska	--	--	--	1	--
Nevada	2	--	1	1	--
New Hampshire	--	--	--	--	--
New Jersey	--	--	--	--	--
New Mexico	7	1	2	2	1
New York	1	--	--	--	--
North Carolina	1	--	2	2	1
North Dakota	--	--	--	--	--
Ohio	13	--	17	14	2
Oklahoma	--	--	1	--	--
Oregon	--	--	1	--	1
Pennsylvania					
Anthracite	--	--	1	--	1
Pennsylvania					
Bituminous	28	13	14	12	7
Pennsylvania					
Noncoal	--	--	--	2	--

\*Chapters Inactive are dropped from the membership roll.

Inactive Chapters deleted by State 1982-1986\*

State	1982	1983	1984	1985	1986
Rhode Island	--	--	--	--	--
South Carolina	--	--	--	--	--
South Dakota	--	--	--	1	--
Tennessee	1	8	3	2	3
Texas	--	1	1	3	1
Utah	2	--	2	--	1
Vermont	--	--	1	--	--
Virginia	1	4	10	24	9
Washington	--	--	1	1	1
West Virginia	--	10	71	77	71
Wisconsin	--	--	2	1	--
Wyoming	1	2	2	2	3
Canada					
British Columbia	--	--	--	--	--
Ontario	--	--	--	--	--
Saskatchewan	--	--	--	--	--
Yukon Territory	--	--	--	--	--
People's Republic of China	--	--	--	--	--
Tanzania	--	--	--	--	--
<b>Totals:</b>					
Deleted	119	62	229	234	193
Chapters Formed	520	866	1221	749	515
<b>Overall Totals</b>	<b>2124</b>	<b>2919</b>	<b>3923</b>	<b>4438</b>	<b>4741</b>

**OCTOBER**

The name of this month is from the Latin Octo, meaning eight; it was the eighth month of the year at Rome, but became the tenth when the beginning of the year was changed from March 1 to January 1. At the same time, it was increased from 30 to 31 days. Several attempts were made to rename the month in honor of one or another of the emperors, and also in honor of Faustina, wife of Antoninus Pius; but those changes did not last.

"Halloween" an ancient celebration occurs during this month. Ancient Druids believed spirits of the dead roamed about the earth during this season. Bonfires were lighted to drive them away. Spirits of the dead are roaming about us daily; we are better acquainted with them as accidents. Let us celebrate Halloween each day as an effort to drive out the accidents within the mining industry.



H.S.A. SAFETY TOPIC

# Program Committees and Accident Prevention



## DISTRICT COUNCIL PROGRAM COMMITTEE

It is believed that participants in the Council individually and collectively, have access to an abundance of interesting, factual information and material related to safety. Since the primary function of the Council is to secure an exchange of such information, the following program is submitted for discussion and approval, in whole or in part, by the Council membership.

It is suggested that each of the Chapters assume responsibility for providing a program for the various meetings for the year. The program could include a guest speaker, and/or motion picture. In order to continue regular Council business, the guest program need not exceed 30 minutes. The Council's program committee could lend assistance in programming if necessary.

## ACCIDENT PREVENTION CLINIC COMMITTEE

The Accident Prevention Clinic committee should meet at least twice a year, preferably in February and September when the previous year's accidents have been summarized and accident trends of the present year are forming definite patterns. Reports of such meetings together with recommendations should be made available to the Council.

### PURPOSE

- (a) Resolve mine safety problems presented at Council meetings and otherwise, of participant chapter mines.
- (b) Provide an exchange of ideas on matters related to mine safety and efficiency.
- (c) Utilize the experience and knowledge of committee membership.
- (d) Discuss unusual accidents which occur at Chapter and other mines and report findings and conclusions to the Council for distribution to the membership.

Special efforts, on the part of everyone, should be made to increase attendance at Chapter and Council meetings.



Coal and Metal/Nonmetal mines which are not presently participating in the program should be solicited to do so.

Means of reminding the membership of pending Council meetings should be considered. This may be accomplished by sending post cards to key members who would in turn remind their associates.

There has been a marked improvement over the years in the safety in the coal and metal/nonmetal mining industries. This improvement is shown in the reduction of fatal accidents and the lowering of the frequency of accidents. The improvement made in this reduction of accidents can be credited to various sources. The effort by company safety programs, inspection, built-in safety devices on equipment and education and training have all contributed their part. Credit for the decrease in the accident rate in the past 5 years is due largely to the excellent cooperation and harmony between employees and employer, and between coal and metal/nonmetal operators and the state and federal inspection agencies. Generally speaking, all segments of the industry realize their responsibilities toward safety.

Despite this improvement, there is still a long way to go before the mineral extractive and allied industries are made as safe as they should be. We must stay on the alert and increase our everlasting war against accidents.

It has been aptly said time after time, that no substitute has yet been found that can replace a well-prepared and informative safety meeting involving management and employees at Chapter and Council levels.

\* \* \* \* \*

## COOPERATION

I could go on for pages about the people who have volunteered and contributed to the success of this Association. Looking at the past list of planning committee members, I see names like Radakovich, Onuscheck, Huntley, Flack, Vicinelly, Keaton, Pugh, Murphy, Krese, Conrad, Hazlett, DeMichiei, Nelson, Thompson and many more who have, at one time or another, given many hours of their time!

Thanks to everyone of you!

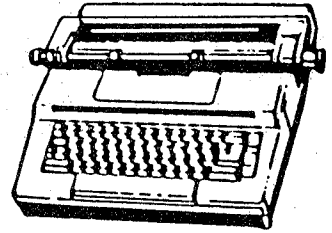
Bill Hoover

October 1987

# HOLMES SAFETY ASSOCIATION

## WHAT'S HAPPENING:

*Special News Round-Up...*



## "We've Had A Facelift"

After eight years, the HSA has decided to change the cover of the Bulletin. We hope you like the new look and appreciate any comments you may have either on the cover or on the contents. As always, we are glad to print any article you have and would like to share with others in the industry. Correspondence should be addressed to:

William H. Hoover  
Holmes Safety Association  
4800 Forbes Avenue  
Pittsburgh, Pennsylvania 15213

## CONTEST, CONTEST, CONTEST!!!

It's time for our 1988 slogan decal contest. Slogans should be eight words or less and received by November 15. The winner will be announced in the January Bulletin and receive a cash prize of \$15.

Send suggestions to:

William H. Hoover  
MSHA, Holmes Safety Association  
4800 Forbes Avenue  
Pittsburgh, Pennsylvania 15213

## REMINDER

Thanks to everyone who responded to our data mailer concerning reporting of safety chapter meetings. We received over 1,000 replies. Please continue to report your meetings on a monthly basis using the green postage-paid form at the back of this Bulletin. We appreciate it.

October 1987

# ABSTRACT FROM FATAL ACCIDENT

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



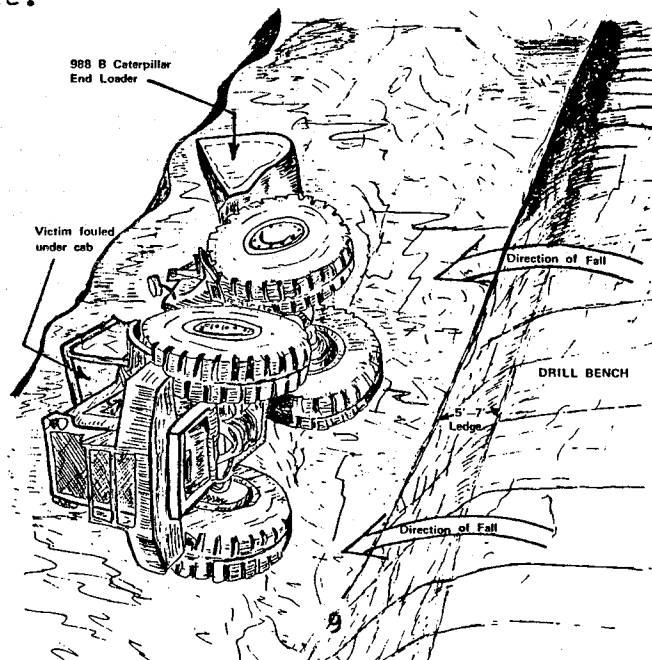
## Fatal Powered Haulage

GENERAL INFORMATION: An accident occurred on a drill bench above a highwall at the working pit of a surface coal mine resulting in the death of an end loader operator. The victim had 5 years mining experience, the last 2 weeks at this operation.

DESCRIPTION OF ACCIDENT: The victim was performing his assigned duty of loading loose overburden from several coalbeds. Work proceeded normally until the victim left the pit and trammed the end loader to the drill bench about 60 feet above the coalbed. The hauler operator, who had been hauling the overburden loaded by the end loader, followed the victim to the drill bench thinking that he was going there to load rock.

He stated that the victim trammed the end loader over to the outer edge of the travelway to allow him to pass with the hauler. He then started backing the end loader as if he was returning to the pit. After traveling a few feet, the ground gave way under the end loader's left wheels, causing the loader to turn over landing on its left side on the bench approximately 7 feet below. The end loader operator later died from injuries received in the fall.

CONCLUSIONS: During investigation, it was found that training had not been accomplished for the newly-employed experienced miners -- a violation of Part 48.26, CFR and, annual refresher training for miners had not been accomplished -- a violation of Part 48.28, CFR. The accident and resultant fatality occurred because the victim trammed the end loader onto unstable ground. Failure of mine management to properly instruct their employees in procedures and policy concerning their work tasks was a major contributing factor to the accident.



# ABSTRACT FROM FATAL ACCIDENT

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



## Fatal Powered Haulage

GENERAL INFORMATION: A front end-loader operator was fatally injured when the loader he was operating went over the edge of an elevated roadway, overturned, and crushed him when the ROPS failed. He had a total of one year, 34 weeks mining experience, all with this company.

DESCRIPTION OF ACCIDENT: The victim had been assigned to move a stockpile of overburden approximately 550 feet to another dump area. The roadway was well compacted and, in essence, smooth and level. Heavy grass and short brush had grown up on the haul road.

The accident occurred as the employee was backing along the elevated portion of the roadway on his return from dumping stripped material. The bank of the roadway at the point the loader went off the road and turned over had an approximate 50-degree slope and a 20-foot length, which resulted in a vertical height of approximately 11 feet. The roadway itself was about 20 feet wide for nearly 200 feet along the elevated portions and then widened out into a hay field.

Upon inspection of the accident scene, it was apparent that not more than four loads had been hauled and dumped prior to the accident and that berms were not provided on the elevated portions of the roadway.

Inspection of the wrecked loader revealed that the rollover protective structure was not the one certified as appropriate for this piece of equipment.

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 loader operator. Contributing to the seriousness of the injuries was the installation of a rollover protective structure that was not certified as appropriate for the piece of equipment it was installed on. Contributing to the seriousness of the accident was that a berm was not provided at the elevated edges of the roadway.



## H.S.A. SAFETY TOPIC



# 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. ROOF FALL:

The victim, a continuous-miner operator, and a roof-bolter operator were repairing the remote control cable to the Jeffrey Model 102HP continuous miner in the left crosscut off No. 2 entry of the 001 section when a roof fall occurred resulting in fatal injuries to the miner operator and slight injuries to the roof bolter. Both miners were inby roof support when the accident occurred.

## 2. HAULAGE:

The victim was in the process of changing the left rear inside tire on the 150-ton Caterpillar back dump coal hauler when the hydraulic jack slipped off of cribbing, shooting out from underneath the axle, striking the victim in the right side, causing internal injuries.

## 3. ELECTRICAL:

The victim was walking up an inclined elevated belt-conveyor structure pulling a wire rope from a winch truck. The end of the wire rope that the victim was pulling came in contact with one phase of a 12,500 volt transmission line. The line was located about 5-1/2 feet above the structure. The victim received a fatal electrical shock.

## 4. POWERED HAULAGE:

The victim was fatally injured when he was crushed between a mobile bridge carrier and coal rib. The continuous-mining machine and mobile bridge were being trammed out by the face of No. 2 room of the 1 east main section when the accident occurred.

## 5. ROOF FALL:

The victim was fatally injured while working in the face area of the No. 2 entry. The victim was struck by a horseback measuring 12 feet long, 3 to 5 feet wide, and 1 foot thick, while in the unsupported face area.

**6. ROOF FALL:**

The victim had just finished installing a pattern roof bolt and was waiting for his partner to finish when a portion of roof rock 10 feet 9 inches long, by 3 feet 7 inches wide, and from 1 to 10 inches thick, separated from the mine roof. The rock which fell from between roof bolts, struck the victim, causing fatal crushing injuries.

**7. MACHINERY:**

A Driltech, MDL D 40 K, truck mounted overburden (vertical) drill, Unit No. W 7033, had just been positioned about 30 feet away and parallel to the highwall edge in area D, by the victim, when the rear left leveling jack sank into the ground, causing the Driltech to overturn. The victim, who was on the drill bench, was between the Driltech and highwall edge when he was struck and carried with the machine approximately 40 feet down to the lower overburden bench. The diesel fuel from the machine then ignited, engulfing the machine in flames. The victim was partially pinned underneath the truck cab and could not be removed until the fire was extinguished, about 15-20 minutes later.

**8. ROOF FALL:**

The victim was working in the face area of the No. 2 entry right crosscut when a roof fall occurred in the center of the crosscut. The fall resulted in the death of a right side jacksetter/timberman, serious injury of the auger miner operator, and slight injury to another right side timberman. Six inches of cap coal were being left during mining operations.

**9. DROWNING:**

The victim attempted to wade out into a strip pit which was filled with water approximately 10 to 12 feet deep, to retrieve a discharge hose which was to be used in conjunction with a water pump to drain the pit area. While doing so, he apparently drowned. The victim was alone at the time of his death.

**10. MACHINERY:**

The victim was observed pushing coal into a hopper (doughnut) at about 4:05 a.m., by the division preparation plant manager. At about 4:15 a.m., the night shift tippie foreman came out of the mine office and observed smoke coming from the doughnut area. The tractor was found in the doughnut in a vertical position, blade first and on fire. Apparently the operator's body went through the feeder into the preparation plant and was subsequently found in the preparation plant wash box.

**11. MACHINERY:**

The accident occurred as the victim was pushing slurry from an abandoned pond over the highwall. A large mass of slurry turned loose and swept the dozer he was operating over the highwall. The highwall was approximately 80 feet high. The victim had 30 years mining experience.

**12. POWERED HAULAGE:**

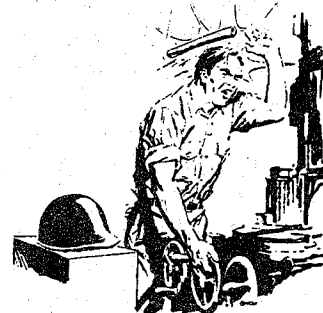
The victim was operating a Mack Model 600 truck equipped with a 4,000 gallon water tank. While applying water to the mine haulage roadway which was under reconstruction, for some unknown reason, the victim was backing the truck down an inclined section of the roadway when the rear tandem wheels traveled over the outer edge of the roadway, allowing the truck to capsize. The victim was found 17 feet upslope from the point where the truck came to rest. There were no eyewitnesses to the accident.

**13. POWERED HAULAGE:**

The victim was operating a rubber-tired mine tractor on the main haulage road when the front end of the tractor contacted the mine roof dislodging a piece of rock 27 inches long, 14 inches wide, and about 3 inches thick, pinning the victim against a safety post in the deck of the tractor, causing serious injury which later resulted in death. The coal bed height averaged approximately 23 inches.

**14. BLASTING:**

The accident occurred when the victim was participating in detonating a charged round for development of a highwall for a future underground mine opening and was struck by flying rock from the blast. The victim had 15 years total mining experience.



**A careful worker  
is a safety device  
that will more than suffice.**



# SAFETY CHECK LIST

## FRONT END LOADERS



An Accident Prevention Program for loaders should stress:

- a. Selection and training of operators
- b. Safe operating procedures
- c. Machinery guards
- d. A high standard of maintenance
- e. Adequate fire protection and housekeeping

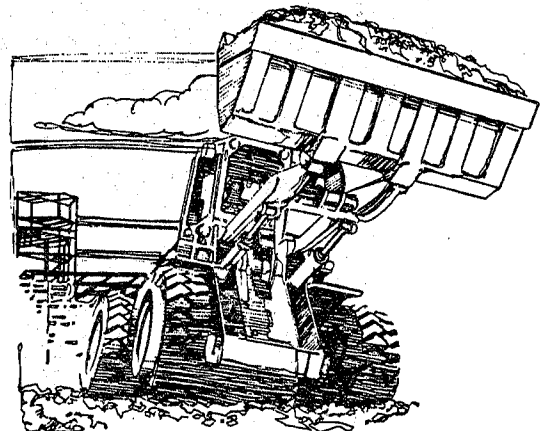
Listed below are the various hazards that should be recognized:

1. Front-end loader accidents occur most frequently when the machine is backing up. Most fatal accidents, however, occur when the unloaded machine is driven at high speed from one area to another. (This movement of the empty loader is called tramping.)

Tramping is dangerous because a front-end loader bounces and weaves, or roadwalks, at high speed when empty. An operator who is not careful may find that control of the machine is unstable. Once roadwalking starts, a driver may tend to drive the loader further out of control, rather than return it to stable operations. At this point, the machine may go over an edge, strike an obstruction, or turn over before it stops.

Downgrades are particularly hazardous. The machine is easier to control when loaded, when traveling good roads, when moving up grades, and when accelerating. Also, articulated, or pivot-steer, loaders are easier to control. They have increased safety with better maneuverability, visibility, and traction. Wider wheel bases and ballast improve their stability.

2. Getting caught in pinch points of the bucket arms or articulated steering.
3. Collisions occur when moving in congested areas.
4. Spilling part of load on operator or others.
5. Upsetting when load is carried too high.

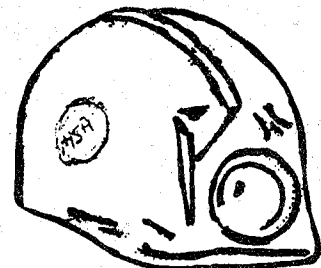
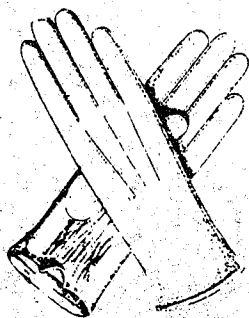




6. Falls into trenches or over unstable banks.
7. Cave-ins caused by undercutting.
8. Riders falling from machine or bucket.
9. Sprains or fractures to operators who jump from machines.
10. Mechanical failures causing injuries.
11. Operator disability causing injuries.
12. Accidents when loaders move freight cars.
13. Hydraulic system failures can cause the bucket to drop unexpectedly and brake defects can cause collisions. A heart attack, fainting spell, or other disability can cause the operator to lose control of the machine and can result in serious damage. Runaway machines can result from failure to block wheels when parked on a grade. Also, if a bucket is left raised while a loader is unattended, there is a chance it will drop on bystanders' feet or legs.

**The following are guides to be considered in selection and training of endloader operators:**

1. Some firms insist that only those in excellent health should be accepted as loader operators. The best practice is to require medical examinations both prior to employment and at regular intervals thereafter. A thorough examination for visual acuity is recommended.
2. Operators should be trained in general plant safety rules. This should be done through indoctrination and follow-up at regular intervals during the first 30 days of employment. Specifically, detailed procedures for front-end loader operations should be explained and demonstrated to the operator. Detailed instructions on traveling unloaded, negotiating grades, working the brakes, and moving in congested areas should be given. Nothing should be taken for granted. It is a good idea for the supervisor to observe the operator on a few "test drives."
3. Minimum personal protective equipment for loader operators is safety hats, safety shoes and safety glasses.



**Safety operating procedures are outlined below:**

1. Because of the pinching hazards of front-end loaders, no riders other than the driver should be allowed. No loader should ever be used as a work platform or staging. Other unorthodox uses of loaders (such as pushing freight cars or trucks) should be avoided; they can cause undetected damage to the loader.
2. One of the principal sources of accidents involving mobile loading equipment is improper backing. Side or rearview mirrors must be installed. Good lighting, both front and rear, should be provided for work under conditions of poor visibility and darkness. Horns should be utilized to serve as a warning and to help the operator regulate truck movements around the machine. Back-up alarms are strongly endorsed as an effective means of preventing backing accidents. Flashing amber or flashing red lights can offer additional protection. Improved windshield wipers also are desirable aids to safety.
3. Loader operators should be sure that everyone is in the clear before starting. It is good practice to walk completely around the machine before starting.
4. Other major factors in accidents during truck loading operations include truck position, driver location, and traffic flow.
  - a. Loader operators should move cautiously, especially in congested areas. The truck should be loaded from the driver's side whenever possible.
  - b. The loader operator and the truck driver should agree where the driver will stay while the truck is being loaded: either in the cab (on cab-protected trucks) or away from both the loader and the truck -- never on the truck body.
  - c. Finally, an efficient loading operation will have an established, planned, traffic-flow procedure to eliminate confusion and thereby avoid accidents.
5. When operating a loader on a haul road, the operator should yield the right-of-way to all loaded hauling vehicles.
6. Locations in which loaders are required to operate on grades are particularly hazardous. Near excavations and edges should be guarded by riprap, barricades, or other means to minimize the possibility of an uncontrolled machine running off the side. A definite procedure should be followed when descending grades:

- a. Loader speed should be regulated to a minimum.
  - b. The engine should be left engaged.
  - c. Transmission should be in low range.
  - d. The bucket should be carried as low as possible and tilted back to minimize bouncing.
7. The operator should work the brake conservatively in order to maintain good air pressure for emergencies. Dropping the bucket after a runaway has gained speed appears to be ineffective as a braking device. It may cause the loader to swing aside and turn over. Brakes should function quickly and "lock-up" when applied hard. Ice causes special problems -- be sure the operator is aware of proper braking and steering procedures in inclement weather.
8. Because of the danger in tramping (driving the loader when empty), serious consideration should be given to road conditions and grades to be negotiated when moving loaders.
9. Rubber-tired loaders should be tied down or chocked whenever they are transported. They should be positively controlled whenever they are moved without an operator. For example, they should not be allowed to roll freely down a ramp when being loaded or unloaded from low-boy trailers.
10. Equipment left unattended should be locked or made inoperable so that unauthorized persons, particularly children, cannot start the engine. Units must not be parked on an incline facing uphill or downhill unless they are securely blocked.
11. Buckets should always be grounded when the operator leaves the cab.

**The following suggestions concern machinery guards:**

1. Operators should be protected from pinch-point hazards on many types of loaders, particularly older models. Bucket side arms which pivot behind the operator and which, when elevated, reach above the cab of the machine have been responsible for many serious injuries and fatalities. Necessary safeguards are:
  - a. Total enclosure of the operator's cab, allowing only a front or rear opening for access.

- b. Guard screens mounted on the bucket arm so that they enclose the sides of the loader cab when the bucket is elevated.

Today, most manufacturers have modified the design of bucket arms and pivot points to minimize pinch-point hazards.

2. Articulated loaders will crush a rider when they turn to his side. Signs warning of this danger and prohibiting riders should be placed on the sides, if manufacturers have not already done so.
3. Operators can be crushed or struck when they drive their equipment where there is insufficient over-head clearance. Protection would be provided by anti-roll bars or a strong canopy or cab.
4. Upsetting a loader greatly endangers the operator unless the loader has a cab or canopy that is structurally adequate to protect him. All machines should be equipped with roll over protection systems. In addition, the use of seat belts greatly increases the safety of the operator when overhead protection is adequate to support the machine. Cabs or canopies, however, should not hamper the operator's vision.
5. Loading of large or oversized material can be hazardous to the loader operator because of the possibility of material falling from the elevated bucket into the cab or on the operator. Only loaders equipped with protective canopies and heavy screen shields should be considered for this type of work. Operators working in stockpiles should be cautioned against the danger of undercutting (particularly frozen material.)
6. Suitable steps and handholds should be provided on the loader to enable the operator to get in safely. Slip-resistant grating is recommended on all steps. Jumping from the machine should be prohibited.
7. The high center of gravity of many loaders is aggravated by loaded, elevated buckets and unstable ground conditions. Neither bucket sizes nor load weight should exceed the machine rating, because excessive load will jeopardize stability.
8. Loaders should be protected against brake failure and other causes of runaway or loss of control. Use of brake-emergency devices (such as the spring-loaded type used on airbrake equipment) should be considered.

**Listed below are suggested maintenance procedures:**

1. Shop or field service platforms and ladders used to maintain the loader should be solidly constructed and should have nonskid surface areas where practical; guard rails should be provided at levels above four feet.
2. Preventive maintenance should follow manufacturer's recommendations, as modified by operating experience, and particular attention should be given to the brake systems. Brakes should be checked regularly by the maintenance department and daily by the operator. Malfunctions should be corrected immediately. Reservoir tanks on loaders equipped with air-actuated brakes should be bled at the beginning and end of each work shift, particularly in cold climates. (Operators must check that the bleed valves are closed before starting their shift. These valves are very often left open and low air pressure causes trouble.) The use of alcohol vaporizers, automatic moisture ejectors, or both in air systems will effectively prevent brake failure caused by freezing.
3. Other items that should be checked often are the condition of tie rod ends and wheel alignment. Tire pressure should be maintained at proper levels. Unequal tire pressures increase bouncing.
4. Unmounted tires being inflated or deflated should be placed in a tire safety cage, because the force with which lock rings have been blown off has been known to maim or kill.
5. The engine should always be shut off when performing maintenance or repair. Maintenance personnel working on mobile equipment should always protect themselves against unexpected movement by:
  - a. Locking out the starting switch on equipment that has this provision.
  - b. Placing a warning tag on the starting control.
  - c. Operating controls only from the operator's position, and never reaching for them from the floor.

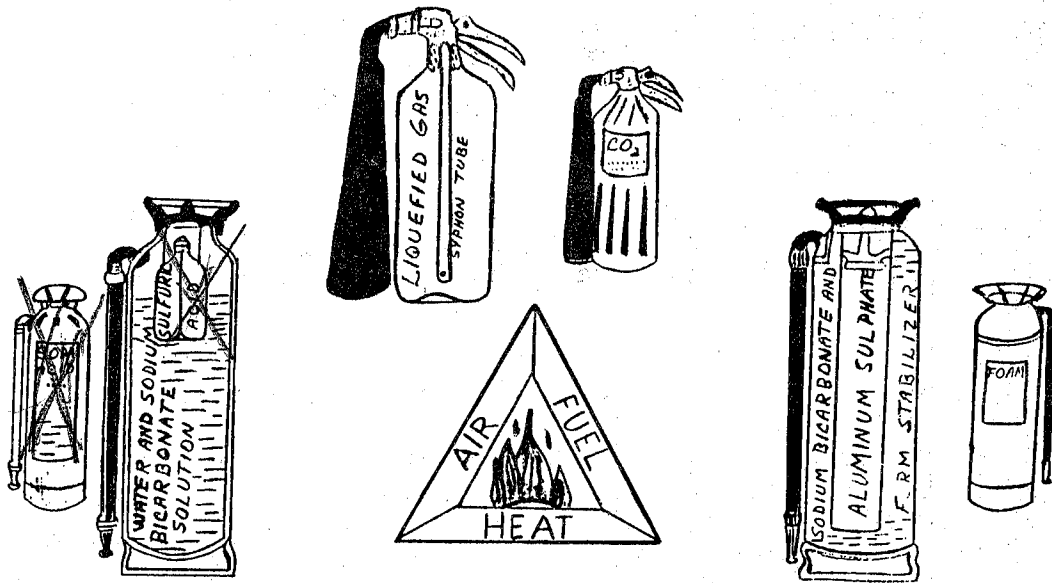
Loader wheels should always be blocked during maintenance procedures. When buckets and hoisting gear are above their lowest position, they should be blocked with substantial cribbing.

6. Lock bars should be installed on articulated loaders to hold the front and rear units rigidly in line. Reserve pressure in the steering system might otherwise allow the unit to turn even though the motor was not running. The lock bar prevents any accidental movement from pinching anyone and prevents the unit from turning if it accidentally starts to roll.

**Suggestions concerning fire protection and housekeeping:**

1. Each unit should be provided with a fire extinguisher approved for the specific hazard category.
2. The operator's cab should be kept clean and free of chains, lunch buckets, tools and other nonessentials.

# KNOW



## the Location of Fire Extinguishers

# HOLMES SAFETY ASSOCIATION

## NATIONWIDE DISTRICT COUNCIL COMPETITION STANDINGS FIRST HALF OF 1987

COAL	LEADERS	JAN./JUNE
<u>Group I - Underground Coal</u> - 3,000,000 or more work hours.	William "Scotty" Groves, District Council, Uniontown, Pennsylvania, with 3,085,091 hours of exposure, 134 lost-time accidents with no fatalities for an incidence rate of 8.69.	
<u>Group II - Underground Coal</u> - 1,500,000 - 2,999,999 work hours.	Southeast Ohio District Council, Wilkesville, Ohio, with 1,941,980 hours of exposure, 58 lost-time accidents and zero fatalities, for an incidence rate of 5.97.	
<u>Group III - Underground Coal</u> - 1,499,999 or less work hours.	Windber District Council, Windber, Pennsylvania, with 137,679 hours of exposure, four lost-time accidents and no fatalities for an incidence rate of 5.81.	
<u>Group I - Surface Coal</u> - 2,000,000 or more work hours.	Northern Colorado/Southern Wyoming District Council, Rawlins, Wyoming, with 2,588,979 hours of exposure, 34 lost-time accidents and no fatalities for an incidence rate of 2.63.	
<u>Group II - Surface Coal</u> - 1,000,000 - 1,999,999 work hours.	Southern Indiana Joint Safety Committee and Holmes Safety Association, Lynnville, Indiana, accumulated 1,774,737 hours of exposure, 14 lost-time accidents and no fatalities for an incidence rate of 1.58.	
<u>Group III - Surface Coal</u> - 999,999 or less work hours.	Kiski-Tri County District Council, Ford City, Pennsylvania, with 69,892 hours of exposure, injury and fatality free for an incidence rate of 0.00.	

METAL/NONMETAL	LEADERS	JAN./JUNE
<u>Group II - Underground</u> - 1,500,000 or more work hours.	Northern Colorado/Southern Wyoming District Council, Rawlins, Wyoming, with 2,787,071 hours of exposure, 32 lost-time accidents, zero fatalities for an incidence rate of 2.30.	
<u>Group III - Surface</u> - 999,999 or less work hours.	Northern Colorado/Southern Wyoming District County, Rawlins, Wyoming, accumulated 27,825 hours of exposure, injury and fatality free for an incidence rate of 0.00.	

October 1987

# HOLMES SAFETY ASSOCIATION

## NATIONAL DISTRICT COUNCIL COMPETITION STANDINGS FIRST HALF OF 1987

Fifteen coal underground and 16 coal surface district councils were in competition for the first six months of 1987. Two underground and two surface district councils failed to submit second quarter reports on time. Congratulations are in order to 14 of 15 underground and 15 of 16 surface coal councils for being fatality free.

Hats off to the Northern Colorado/Southern Wyoming Metal and NonMetal Underground and Surface District Council! Underground reported 2,787,071 work hours of exposure, 32 lost-time accidents, zero fatalities, for an incidence rate of 2.30. Surface operations reported 27,825 work hours, injury and fatality free for a 0.00 incidence rate.

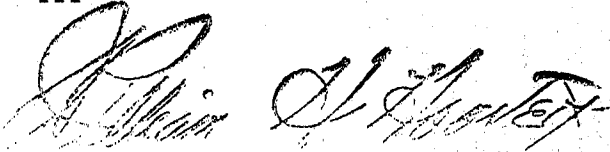
The three groups of Underground Coal Council Mines reported 27.63 million work hours, three fatalities and 1,449 lost work day injuries for an incidence rate of 10.51 per 200,000. Work hours and injuries increased 0.56 million and 444 respectively; although fatalities decreased by five, the overall incidence rate increased 3.04 over the corresponding period in 1986.

The three groups of Surface Coal Council Mines reported 12.57 million work hours, one fatal and 202 lost work day injuries for an incidence rate of 3.21 per 200,000 work hours of exposure. Work hours and injuries increased 2.41 million and 55 respectively; although fatalities decreased by two with the incidence rate climbing 0.26 over the same period of 1986.

Combined Underground and Surface Coal Mines reported 40.20 million work hours, four fatalities and 1,651 lost work day injuries for an incidence rate of 8.23 per 200,000 work hours of exposure. Work hours and lost-time injuries increased 2,913,138 and 449 respectively; fatalities fell by seven for an increase in the incidence rate of 1.99 over the corresponding period of 1986.

The rate of nonfatal lost-time injuries in district council mines was 8.21, an increase of 2.05 over the same period in 1986. The fatality rate was 0.019 for the first half compared with 0.059 for the same period of 1986.

To remain in competition for 1987, all district councils are reminded that the third quarter district council report should be mailed no later than November 30 (60 days following the end of the quarter). I believe there are problems that arise and sometimes delay getting your quarterly reports to the National Council on time. If you have any problems, please call the Pittsburgh or Tucson office and we will be happy to be of assistance.



William H. Hoover  
Secretary



HOLMES SAFETY ASSOCIATION  
 SORTED BY STANDING  
 COAL-SURFACE  
 SAFETY COMPETITION REPORT

YEAR-TO-DATE: JANUARY THRU JUNE 1987

QUARTER 2

COUNCIL NAME	CNCL NUM	WORK HOURS	LOST TIME	INCI- DENCE	NO	NO	MTGS	CHAP	STD	WORK HOURS	LOST TIME	INCI- DENCE	RATES	MTGS	CHAP	STD	TOT NO	AVG NO
GROUP I																		
N COLO/S WYOMING HSA DISTRICT COUNCIL	WY02	1,251,133	21	0	3.36	1	19	2	2,588,979	34	0	2.63	0	2.63	1	9.5	1	xxx
SOUTHERN ILLINOIS OPEN-PIT	IL06	1,261,661	20	0	3.17	1	14	1	2,002,428	27	0	2.70	0	2.70	2	6.3	2	xxx
GROUP II																		
SOUTHERN INDIANA JT SAFETY COM & HSA	IN02	887,083	9	0	2.03	2	6	1	1,774,737	14	0	1.58	0	1.58	3	3.0	1	xxx
COAL RIVER COUNCIL	WV02	695,188	25	1	7.47	2	35	2	1,059,009	41	1	7.93	1	7.93	3	17.5	2	xxx
GROUP III																		
KISKI - TRI-COUNTY COUNCIL	PA08	36,935	0	0	.00	2	2	1	69,892	0	0	.00	0	.00	5	1.0	1	xx
CLYMER COUNCIL	PA04	18,013	0	0	.00	2	2	3	33,130	0	0	.00	0	.00	5	1.0	2	xx
MON VALLEY COUNCIL	WV08	0	0	0	.00	0	0	4	275,634	2	0	1.45	0	1.45	1	11.3	3	xxx
GROVE CITY/CLARION COUNTY COUNCIL	PA05	370,756	4	0	2.16	0	14	7	775,893	8	0	2.06	0	2.06	1	7.0	4	xxx
NEW RIVER VALLEY COUNCIL	WV10	0	0	0	.00	0	0	4	364,808	4	0	2.19	0	2.19	1	11.3	5	xxx
WESTERN MARYLAND	MD02	322,481	3	0	1.86	1	21	6	437,758	5	0	2.28	0	2.28	2	10.8	6	xxx
SOUTHEAST OHIO COUNCIL	OH02	658,187	13	0	3.95	3	11	11	960,957	14	0	2.91	0	2.91	6	5.5	7	
SHAWNEE OPEN-PIT	IL05	386,151	6	0	3.11	1	5	9	386,151	6	0	3.11	0	3.11	1	1.3	8	xxx
N. INDIANA JT. COMM. FOR COAL MINE SAF	IN01	463,531	7	0	3.02	2	6	8	891,116	14	0	3.14	0	3.14	3	3.0	9	xxx
KANAWHA VALLEY	WV07	211,943	4	0	3.77	1	100	10	510,021	16	0	6.27	0	6.27	2	50.0	10	xxx
JOHN O MILLER COUNCIL	PA09	41,644	1	0	4.80	2	1	12	84,041	3	0	7.14	0	7.14	5	.5	11	xx
WINDEB COUNCIL	PA11	19,083	0	0	.00	1	1	2	27,326	1	0	7.32	0	7.32	2	.5	12	xxx
INDIANA COUNCIL	PA07	158,362	7	0	8.84	3	5	13	327,946	13	0	7.93	0	7.93	5	2.5	13	xx

October 1987

\* NO DATA EXISTS FOR A QUARTER  
 \*\* CHAPTER AVERAGE IS LESS THAN  
 \*\*\* NUMBER OF MEETINGS IS LESS TH

HOLMES SAFETY ASSOCIATION  
 SORTED BY STANDING  
 COAL-UNDERGROUND  
 SAFETY COMPETITION REPORT

YEAR-TO-DATE: JANUARY THRU JUNE 1987

QUARTER 2

COUNCIL NAME	CNCL NUM	WORK HOURS	LOST TIME ACC	FTLS	INCI-DENCE RATES	MTGS	CHAP	STD	WORK HOURS	LOST TIME ACC	FTLS	INCI-DENCE RATES	MTGS	CHAP	STD	
GROUP I																
WILLIAM "SCOTTY" GROVES COUNCIL	PA06	1,481,094	73	0	9.86	2	18	1	3,085,091	134	0	8.69	5	9.3	1	
JOHN E. JONES	ILO2	2,758,854	145	0	10.51	1	14	2	5,651,065	265	0	9.38	2	7.0	2	
INDIANA COUNCIL	PA07	1,720,150	210	0	24.42	3	17	3	3,528,686	372	0	21.08	5	8.5	3	

GROUP II

SOUTHEAST OHIO COUNCIL	OH02	909,401	27	0	5.94	3	7	2	1,941,980	58	0	5.97	6	3.5	1
KASKASKIA VALLEY	ILO3	915,213	36	0	7.87	1	6	3	1,968,642	65	0	6.60	2	3.0	2
NORTH CENTRAL COUNCIL	WV11	1,028,194	51	0	9.92	1	5	5	2,075,759	83	0	8.00	2	2.3	3
WALTER W. KINGEISH-KESSLER	ILO7	969,209	48	0	9.90	1	5	4	1,928,796	80	0	8.30	2	2.5	4
NEW RIVER VALLEY COUNCIL	WV10	0	0	0	.00	0	0	1	1,510,776	72	0	9.53	1	10.0	5
COAL RIVER COUNCIL	WV02	1,227,138	84	0	13.69	2	58	6	2,568,208	130	1	10.20	3	29.0	6

GROUP III

WINDBER COUNCIL	PA11	63,300	3	0	9.48	1	7	5	137,679	4	0	5.81	2	3.5	1
N COLO/S WYOMING HSA DISTRICT COUNCIL	WY02	236,584	6	0	5.07	1	5	2	464,817	15	0	6.45	1	2.5	2
KANAWHA VALLEY	WV07	320,501	15	0	9.36	1	100	4	708,368	33	0	9.32	2	50.0	3
CLYMER COUNCIL	PA04	69,841	3	0	8.59	2	6	3	141,688	7	0	9.88	5	3.0	4
POTOMAC VALLEY	MD01	465,095	40	1	17.63	1	7	7	927,015	53	1	11.65	3	3.8	5
KISKI - TRI-COUNTY COUNCIL	PA08	103,690	8	0	15.43	2	5	6	212,794	13	0	12.22	5	2.5	6
MON VALLEY COUNCIL	WV08	0	0	0	.00	0	0	1	113,246	8	0	14.13	1	2.5	7
JOHN O MILLER COUNCIL	PA09	325,218	35	0	21.52	2	2	8	664,547	67	1	20.47	5	1.0	8

October 1987

\* NO DATA EXISTS FOR A QUARTER  
 \*\* CHAPIER AVERAGE IS LESS THAN 3  
 \*\*\* NUMBER OF MEETINGS IS LESS THAN 4

HOLMES SAFETY ASSOCIATION  
SORTED BY STANDING  
METAL-UNDERGROUND  
SAFETY COMPETITION REPORT

QUARTER 2 YEAR-TO-DATE: JANUARY THRU JUNE 1987

COUNCIL NAME	CNCIL NUM	WORK HOURS	ACC	FTLS	MTGS	CHAP	STD	HOURS	ACC	FTLS	RATES	INCI-DENCE		TOT	AVG	
												NO	NO			NO
GROUP II																
N COLO/S WYOMING HSA DISTRICT COUNCIL	WY02	1,511,434	19	0	2.51	1	5	1	2,787,071	32	0	2.30	1	2.5	1	***

HOLMES SAFETY ASSOCIATION  
SORTED BY STANDING  
METAL-SURFACE  
SAFETY COMPETITION REPORT

QUARTER 2 YEAR-TO-DATE: JANUARY THRU JUNE 1987

COUNCIL NAME	CNCIL NUM	WORK HOURS	ACC	FTLS	MTGS	CHAP	STD	HOURS	ACC	FTLS	RATES	INCI-DENCE		TOT	AVG	
												NO	NO			NO
GROUP III																
N COLO/S WYOMING HSA DISTRICT COUNCIL	WY02	14,245	0	0	.00	1	1	1	27,825	0	0	.00	1	.5	1	***

\* NO DATA EXISTS FOR A QUARTER  
 \*\* CHAPTER AVERAGE IS LESS THAN 5  
 \*\*\* NUMBER OF MEETINGS IS LESS THAN 4

# THE LAST WORD

The President of a highly rated company was asked the secret of his success, "It's really very simple" he said. "I always apply the rule of 3D's: Do it, Delegate it, or Ditch it."

-----  
Being right is seldom enough, even the best ideas must be packaged and sold.

-----  
The time to stop talking is before people stop listening.

-----  
You can make more friends in two months by becoming really interested in other people than you can in two years by trying to get other people interested in you. Which is another way of saying that the best way to make friends is to be one!

Wires not properly grounded are as dangerous as a loaded gun.

While two employees were engaged in dragging steel cable up a small hill during a rain storm, the cable was pulled over a ground wire from switch control panel grounded to an old vibrating screen lying on the ground. As the cable passed over the charged wire, the electricity caused one man to freeze to the cable and the other to be knocked clear. Apparently the grounding effect the one man made was sufficient to keep the other from being electrocuted also.

Proper grounding is very essential on all electrical installations and extreme care should be exercised when handling tools or material in proximity to exposed wires even though they are insulated.

-----  
**ACCIDENTS ARE CAUSED BY PEOPLE, SO THEY CAN BE PREVENTED BY PEOPLE, TOO!!!**

**SIGN ON A PARK LAWN: "Your feet are killing me!"**

When was the last time you made sure all your car's lights were working? Check all turn signals, brake lights, high and low beams on your headlights and even the light over your car's license plate.

**SIX ESSENTIALS FOR SUCCESS: SINCERITY — PERSONAL INTEGRITY — HUMILITY — COURTESY — WISDOM — CHARITY**

# 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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