## BULLETIN



## KEEP US IN CIRCULATION.

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.

## WELCOME

NEW MEMBERS

## NAME

Malenski Mining Co., Inc.
T.K. Coal Inc.

Magna Copper Co.
Forte Bros. Inc.
Kaser Corp.
Beco Corp. Mine No. 5
Kiah Creek Mining Co. Mine No. 2
Bevins Energy Corp. Mine No. 1
Coal Mole Inc.
F and S Coal Co.
Robin Resources Inc.
Laurel Creek Co., Inc.
Big South Mining \& Const. Co. 8474
H.E.L. Coals Inc. 8475
H.E.L. Coals Inc. 8476

Genesis Mining Co. 8477
Industrial Energy 8478
Louis E. Marra Melody Mining Corp. 8479
Verity Coal Corp. 8480
Oscar Roberts Concrete Products Co. 8481
R and H Coal Co., Inc. 8482
Johnstown Coal Co. 8483
Leckie Smokeless Coal Co. 8484
Lucky L and L Coal Co., Inc. 8485
Starr Mining Co. 8486
LKS Enterprises $\quad 8487$
Quincy Dock 8488
Smith No. 1 Mine 8489
K-B Building 8490

## LOCATION

Slippery Rock, PA
Kingwood, WV
San Manuel, AZ
Cumberland, RI
Des Moines, IA
Rockhouse, KY
Etty, KY
Kimper, KY
Roxana, KY
Mayking, KY
Julian, WV
Dingess, WV
Dingess, WV
Clear Creek, WV
Clear Creek, WV
Springfork, WV
Smithers, WV
Flemington, WV
Pennington Gap, VA
Maple Grove, MN
Jewell Ridge, VA
Chelyan, WV
Rupert, WV
Hurley, VA
Hulen, KY
Corbin, KY
Quincy, WV
Girty, PA
Johnstown, PA
WINTER ALERT


# H.S.A. SAFETY TOPIC 

## EQUIPMENT GUARDING

## BASIC PRINCIPLES OF GUARDING

Mandatory standard 55, 56, 57.14-1 specifies that all gears; sprockets; chains; drive, head, tail and takeup pulleys; flywheels; couplings; shafts; sawblades; fan inlets; and similar exposed moving machine parts, which may be contacted by persons and which may cause injury to persons, shall be guarded.
Many accidents result from moving machinery and persons working on or around machinery must be protected. The installation and maintenance of machinery and machine guards are governing factors in controlling and preventing accidents and injuries. In devising protection against moving machinery and machine parts, the goal should be to make it as effective as possible. All possible contingencies should be considered, including acts of thoughtlessness and foolhardiness, in guarding machinery to prevent injuries.
An effective machine guard should have certain characteristics in design and construction. Such a guard should:

1. Be considered a permanent part of the machine or equipment.
2. Afford maximum positive protection.
3. Prevent access to the danger zone during operation.
4. Be convenient; it must not interfere with efficient operation.
5. Be designed for the specific job and specific machine, with provisions made for oiling, inspecting, adjusting and repairing machine parts.
6. Be durable and constructed strongly enough to resist normal wear.
7. Not present a hazard in itself.

When the installation of guards is contemplated, persons who have a specific interest in them should be consulted. The opinion of the operator of the machine, the supervisors, the maintenance personnel and the oilers should be solicited. However, it must be kept in mind that protective guards placed around moving machinery should be completely enclose the moving part and should be positioned so that the moving equipment or pinch point which presents a hazard cannot be reached.

[^0]Materials for guards should be carefully selected. For most installations, guards of bar stock, sheet metal, perforated metal, expanded metal, or heavy wire mesh are more satisfactory than those of other materials.

The larger guards frequently are of pipe or a structual steel frame supporting wood, solid sheet metal, or wire mesh that will provide a positive barrier against moving parts.
Guards of wood have limited application; their lack of durability and strength, relatively high maintenance cost and flammability are objectionable.
Guardrails and toeboards frequently are installed around flywheels, hoisting equipment, etc., and are applicable to many other kinds of mechanical equipment.

## THE TECHNIQUES OF MECHANICAL GUARDING

It is recognized that a given situation -- a hazard-creating motion or action -- may frequently be guarded in a number of ways, several of which may be satisfactory. The selection of guarding a method to be used may depend upon a number of things -- space limitations, production methods, size of stock, frequency of use and still other factors may be important in making the final decision. Moving machine parts, nip points and pinch points must be guarded individually rather than restricting access to the areas by installing railings. It is not the intent of this guide to suggest which method of guarding is the best for a given situation, but rather to show that there are a number of ways to guard each different condition. This will be done by illustrating typical situations which may be guarded by a variety of methods.

In the following illustrations, the various motions and actions are shown without guards; also, they are shown with typical guards illustrating the various guarding techniques along with written explanation for your thought and guidance. It is not possible to apply all of the guarding techniques to all of the motions or actions, but an effort has been made to show those that are frequently found in the mining industry.


FIGURE 1 and 2
Figure 1 shows a self-cleaning tail pulley with an inadequate guard. This should not be accepted as being guarded.
The guards are placed too far from pulley, leaving the fins and pinch points exposed.

WINTER ALERT

Figure 1
FIGURE 3 and 4
The guard for the tail pulley in figure 3 does not cover the pinch point and therefore is not effective.
A smooth pulley can be totally enclosed, or guarded along the sides as shown in figure 4.
Side guards are only effective when placed close to the pulley and extending a distance sufficient so the pinch points can not be reached from the front, the back or the top.


This type of pulley should be totally guarded as shown in figure 2. The guard also covers the pinch point created by the transfer chute.


Figure 2
FIGURE 6 and 7
The reason for guarding return idlers is shown in the lower drawing of figure 6 .
Return idlers can be guarded by blocking access underneath the conveyor, or individually as shown in the top drawing of figure 6.
The guard can be installed with or without the end caps. Care must be taken not to place the guard too close to the return idler and the space between the guard and the belt should only be 1 to 2 inches.

FIGURE 5
Remote areas protected by location need not be guarded. However, if work is performed at such location as shown in figure 5, the safe means of access (ladder) provided before any work is started.


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& \text { FIGURE } 8 \text { and } 9 \\
& \text { An unguarded head pulley and drive unit are shown in figure } 8 .
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$$


A detailed drawing of a guard for a single return idler is shown in
figure 7 .


Figure 7

WINTER ALERT

$$
\begin{aligned}
& \text { FIGURE } 10 \\
& \text { A stop cord along a conveyor belt with a walkway is shown in figure } \\
& \text { 10. The stop cord is located alongside and above the belt for the } \\
& \text { following reasons: } \\
& \text { 1. It is within easy reach. } \\
& \text { 2. A person falling against the belt will automatically trip the cord. } \\
& \text { 3. Spillage from the belt will not trip the cord. } \\
& \text { Standard } 9-7 \text { should be used when the walkway is part of the con- } \\
& \text { veyor, or where persons are required to travel alongside unguarded } \\
& \text { conveyors at ground level. }
\end{aligned}
$$

Figure 9 shows the guard in place.
The head pulley guard is extended so the pinch point cannot be The head pulley guard is extended


JANUARY, 1990

ABSTRACT
FROM
*This fatality could be discussed at your FATAL ACCIDENT

# FATAL EXPLOSION OF VESSELS UNDER PRESSURE ACCIDENT 

## DESCRIPTION OF ACCIDENT: On the day of the accident, the laborer (victim)

 reported to work at the kaolin clay plant and mine at his regular starting time. He was assigned the task of welding gussetts on a tire/rim assembly for a panscraper. The victim positioned himself in a sitting position inside the rim and was welding the last of 36 gussetts when an explosion occurred in one of the two tires.The force of the explosion caused the multi-piece rim to separate. The rim components became airborne and struck an oxygen cylinder which was secured in a cylinder cart located about 15 feet away and in line with the force of the explosion. The rim components and the oxygen cylinder continued airborne for approximately 165 feet and severed a six-inch diameter tree approximately 10 feet above ground level before striking an embankment. The outer rim flange continued airborne for another 60 feet before coming to rest. The force of the explosion caused the rim that the victim was welding in to be hurled in the opposite direction against a parts trailer. The tire on this rim remained inflated.
CONCLUSION: The primary cause of the accident was the failure to deflate the tires and remove them from the rims before welding was performed.
The secondary cause of the accident was the application of a heat source (arc welder) to the tire/rim assembly which caused a sudden and drastic increase in pressure/gases to the inflated tire and resulted in the explosion.

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

## ROOF FALL ACCIDENT

GENERAL INFORMATION: A roof-fall accident occurred in the No. 1 unit in the No. 4 entry working place of the mine resulting in the roof-bolting machine operator sustaining crushing-type injuries. The victim had 12 years mining experience, with 7 years at this mine as a roof-bolting machine operator.
DESCRIPTION OF ACCIDENT: On the day of the accident, the No. 1 section crew entered the mine and traveled to the active working area of the section. The supervisor stated that he examined the face, travelways and haulageways. He assigned the victim and the roof-bolting machine helper to tram the shuttle car to the supply hole, located in the No 4 entry, load the supplies and transport them to the working places.
According to the roof-bolting machine helper, he had placed the trailing cable to the roof-bolting machine in a cable hanger in the last open crosscut and was reinstalling the ventilation control in the No. 4 entry working place as the victim installed one temporary roof-support jack on the left side of the face area. A passing shuttle car pulled the roof-bolting machine trailing cable out of the hanger and the roof-bolter helper returned to the last open crosscut to place the cable back in the hanger. He returned to the roof-bolting machine and started preparing roof bolts for installation when he heard the unsupported roof falling in the face. As he looked up, he observed the victim being struck by the piece of falling roof material.
FINDINGS OF FACT: This accident and resultant fatality ocurred due to the following:
1.The approved roof-control plan in effect at this mine was not followed, in that, the system of mining (continuous) being used on the No. 1 unit was not submitted for approval prior to implementing the new mining system, a violation of Section 75.200.
2.The roof was not adequately supported in the No. 4 entry working place on the No. 1 unit, in that, the work of installing roof bolts was being performed inby the last permanent roof support (roof bolts) with only one temporary roof support installed where loose, heavy and slickensided roof was present. The aforementioned conditions contributed to a fatal roof-fall accident, a violation of Section 75.202.


Plans have been finalized to hold the Holmes Safety Association National Council Annual Meeting in Phoenix/Chandler, Arizona, on May 9 and 10, 1990.
American Airlines/American Eagle discount is available for attendees from servicing cities and local airports. Call 1-800-433-1790 and Ask for STAR FILE \#SO-850Q3
Limousine service to and from airport and hotel -- $\$ 9.50$ per person one way Hotel Rates - $\$ 50.00$ single/ $\$ 55.00$ double plus tax

Following is a tentative agenda:

## May 8

Thesday 8:00 AM - 8:00 PM Registration

## May 9

## Wednesday

| 7:00 AM - 8:00 AM | Registration |
| :---: | :---: |
| 8:00 AM - 11:30 AM | National Council Executive Meeting - Lodge |
| 1:00 PM - 5:00 PM | Scottsdale Shopping Expedition Bus Tour |
| 1:30 PM | First Annual Mixed League golf tournament |
|  | (All HSA members- \$28 with cart) (\$50 all others) |
|  | Scores will be by Calloway System 90 up/90 down |
|  | Loads of Prizes |
| 6:30 PM | Western Cookout (Country Club golf course patio) |
|  | Host -- Cyprus Coal Company |

MAY 10
Thursday

| 7:00 AM - 8:00 AM | Registration |
| :---: | :--- |
| 8:00 AM -12:00 PM | National Council Regular Meeting |
|  | Reports of Executive Meeting |
|  | Mine Safety/Merit Awards |
|  | Treasurer's and Financial Reports |
|  | 1990-91 Slate of Officers |
|  | New and Old Business |
| 12:00 PM - 2:00 PM | Lunch |
| 9:00 AM - 1:00 PM | Southwestern Heritage Botanical Garden Bus Tour |
| 2:00 PM - 4:00 PM | Joseph A. Holmes Safety Association |
|  | Board of Directors Meeting |
|  | Joseph A. Holmes Safety Association |
| Regular Meeting |  |
|  | Approval of Awards |
|  | Nomination of Officers |
|  | New and Old Business |

## May 10

Thursday

| 5:30 PM - 6:30 PM | Social Hour host -- National Mine Service |
| :--- | :--- |
| 6:30 PM | Awards banquet on the Veranda |
| $\quad$ under the desert skies |  |
|  | President's Welcoming Address |
|  | Council and Chapter Awards |
|  | Door Prizes and 50/50 Drawing |
|  | Dancing in Lounge |

## MAY 11

## Friday

## CHECK-OUT

(Reservation Forms for Banquet, Hotel, Spouses Tours and Golf Tournament will be forthcoming.)
For further information, please contact H.S.A., 4800 Forbes Ave. Pgh. PA 15213
(412) 621-4500 Ext. 650

OR:
H.S.A., 300 W. Congress, Room 7K, Box FB-52, Tucson, Arizona 85701 (602) 670-6631


## SPECIAL AIRFARES TO PHOENIX, ARIZONA

The Holmes Safety Association has
 selected American Airlines as official carrier for attendees of the Holmes Safety and Joseph A. Holmes Safety Association, National Safety Council Southwest Safety Congress, Western Regional State Grants and American Society of Safety Engineers meetings. American is offering special discounts for attendees and guests.
The meeting saver fares offer a $45 \%$ discount off round-trip day coach fare with a minimum of 14-day advance ticket purchase; $40 \%$ off a 7 -day advance ticket purchase; or a $5 \%$ discount off any other round-trip fare including promotional fares; all rules and restrictions apply.* This offer is valid within the continental United States to travel on American Airlines.
Call early to secure lowest fares available on American and follow these steps:

- Travel between May 5 and 18, 1990.
- Call American's Meeting Services desk at toll-free 1-800-433-1790, between 7:00 AM and 12:00 PM central time, seven days a week.
- Ask for STAR File \#S-0850Q3

Reservations for these special fares are only available through American's Meeting Services desk.
If you use a travel agent, the fares will also be available, provided the above steps are taken.
*Passengers are subject to a $\$ 30.00$ service fee when applying for a full or partial refund once tickets are issued.

## WINTER ALERT

# HOLMES SAFETY ASSOCIATION LODGING RESERVATON FORM 

Please reserve accommodations for:

Name
Arrival Date

Address
Departure Date

City, State, Zip Code
Phone Number
Main hotel rooms are located in close proximity to the hotel lobby, restaurants and gift shops, swimming pool and whirlpool. Lodge guest rooms are situated by the golf course near the meeting room. There is also a swimming pool located adjacent to these rooms.

Please indicate type and location of room required/Check One:
( ) Single Room @ $\$ 50$ per night - - Main hotel room
( ) Single Room @ $\$ 50$ per night -- Lodge guest room
( ) Double Room @ $\$ 55$ per night -- Main hotel room (Sharing with $\qquad$
( ) Double Room @ \$55 per night -- Lodge guest room (Sharing with $\qquad$ Room Tax is $8.9 \%$ per night.

Please enclose a check or money order for one night's deposit or guarantee to credit card
$\qquad$ Master Card
/Expiration date of card $\qquad$ .

Carte Blanche $\qquad$ Diner's Club
$\qquad$ VISA

## Return to: Reservation Department

Sheraton San Marcos Golf and Conference Resort
One San Marcos Place
Chandler, Arizona 85224

## Reservation cut-off date: April 9, 1990

A written confirmation will be sent to each individual upon receipt of deposit.

# Banquet and Tour Reservation Form <br> Holmes Safety Association <br> Joseph A. Holmes Safety Association <br> Annual Meetings <br> Sheraton San Marcos Resort <br> Phoenix/Chandler, Arizona 

May 9-10, 1990
Enclosed is a check for
(number of) banquet tickets at $\$ 24.50$ each (includes tax and gratuity). Dinner includes prime rib of beef au jus, soup or salad, fresh vegctables, potatoes or rice, dinner rolls, dessert and beverage.

Name(s) of attendees (Please list first and last names as all attendees will be issued I.D. badges).
Name and Title $\qquad$

Name and Title $\qquad$
Name and Title $\qquad$
Name and Title $\qquad$
Company $\qquad$
Address $\qquad$

Phone Number $\qquad$
Please return reservation form with check by April 9, 1990 to:
MSHA, Holmes Safety Association 4800 Forbes Avenue

Pittsburgh, Pennsylvania 15213

This year the Association has contracted with a local tour company to make available two tours for spouses, children and guests.

For the nongolfers, there will be a Scottsdale shopping tour on Wednesday afternoon. Shopping in the Scottsdale area of Phoenix includes Fifth Avenue, an area filled with hundreds of shops, many with native Southwestern crafts; Old Town Scottsdale, offering everything from real western boots to exotic leather items; and, The Borgata, a collection of 50 unusual and hand selected boutiques. Bus departs from hotel at 1:00 p.m. and returns at approximately 5:00 p.m.

## Cost: $\mathbf{\$ 1 4 . 0 0}$ per person

Thursday's tour incorporates native Arizona flavor. The first stop is the Heard Museum. Located in an old Spanish hacienda, this museum features countless American Indian artifacts and treasures. Tourgoers will view the Capitol Building and Heritage Square on the way to the Desert Botanical Gardens featuring over 1,000 different cacti and unusual plants growing in a natural desert setting. Bus departs from hotel at 9:00 a.m. and returns at approximately 1:00 p.m.
Cost including admissions to Museum and Gardens: $\mathbf{\$ 2 2} .00$ per person

## Tour Reservation Form

Please reserve the following number of seats on the bus tour(s):
$\ldots$ seats for Scottsdale Shopping Tour @ $\$ 14.00$
$\ldots$

Enclosed is a check* in the amount of \$ $\qquad$

[^1]
## Golf Reservation Form

## "PLAY GOLF"

in the
First Annual Holmes Safety Association
Mixed League Tournament


Make checks payable to: John Clark, Pro
Mail to:
MSHA, Holmes Safety Association
4800 Forbes Avenue, Room A-271
Pittsburgh, Pennsylvania 15213
I/We want to play in the tournament:
$\qquad$
$\qquad$
$\qquad$

Tournament limited to 140 players.
Address: $\qquad$

# Silver Anniversary Announcement 



Arizona Chapter
National Safety Council

## Southwest Safety Congress

25th Annual Safety Congress And Exhibits to be held on May 8, 9 \& 10, 1990.

## Location:

Sheraton San Marcos Resort
Phoenix/Chandler, Arizona

## MsHA Held in conjunction with:



Holmes Safety Association Joseph A. Holmes
National Council Annual Meeting
\&


## Western Regional State Grants Meeting

Hosted by the Arizona State Mine Inspector
Douglas K. Martin

Registration and Exhibit Information




## H.S.A. SAFETY TOPIC

## DANGER: COMPRESSED AIR

Many of us in the industry work around pressurized gases and liquids every day.
Compressed air lines, gas cylinders, heavy duty tires and hydraulic hoses are used so often that you probably don't think of them as being particularly dangerous. Unfortunately, a lot of these people have found out the hard way just how dangerous -- even deadly -- these things can be.

When you think of air, you probably just think of it as a life-sustaining commodity. But a compressed air stream, needling through a small opening, can penetrate your skin and cause excruciating pain.

Industrial air compressors can produce compressed air at the rate of 80 to 100 pounds per square inch; however, the human body cannot tolerate more than 3 to 4 pounds per square inch of direct pressure.

Recently, a mechanic found out how dangerous compressed air can be after he used an air gun to dry some automotive parts. A jet of air entered a small cut on his hand. A short time later, he staggered to his supervisor, complaining that his body felt like it was going to explode. His condition was diagnosed as air bubbles in his blood stream. Fortunately, he recovered, but not before suffering many pain-filled hours.

Here are some points to remember if you use compressed air

## 1. TURN OFF AIR PRESSURE WHEN HOSES ARE NOT IN USE AND WHEN CHANGING POWER TOOLS.

2. CHECK THAT ALL CONNECTIONS ARE TIGHT BEFORE TURNING ON THE AIR PRESSURE. END OF HOSES SHOULD BE TIED, WHERE POSSIBLE.
3. CHECK HOSES REGULARLY FOR CUTS, BULGES AND ABRASIONS.
REPLACE HOSES WHEN NECESSARY.
4. WHEN SPRAY-PAINTING OR BLAST-CLEANING, BE SURE THAT EVERYONE NEARBY IS WEARING PROTECTIVE CLOTHING.
5. NEVER DIRECT THE FLOW OF COMPRESSED AIR TOWARD YOURSELF OR OTHERS.

WINTER ALERT

A compressed gas cylinder can explode if rough handling results in structural damage to the casing. A standard welding gas cylinder pressurized at 2250 pounds per square inch can become a rocket reaching a speed of 34 miles per hour in one-tenth of a second as a result of venting from a broken valve connection. This is not to mention the possible combustion of escaping gas, which, in some instances, will be highly flammable. Cylinders must, therefore, be handled with the utmost care. Following are a few safety rules:

1. HANDLE ALL COMPRESSED GAS CYLINDERS AS IF THEY ARE FULL. KEEP THE CYLINDERS ON END AND STRAP OR CHAIN THEM SECURELY. USE A CYLINDER TRUCK TO MOVE THEM.
2. KEEP THE PROTECTIVE CAP OVER THE VALVE SCREWED IN PLACE WHEN THE CYLINDER IS NOT IN USE.
3. ALWAYS STORE GAS CYLINDERS WHERE THERE IS NOT TOO MUCH VARIATION IN TEMPERATURE.
4. NEVER LET OIL -- NOT EVEN ON YOUR HANDS -- GET NEAR OXYGEN CYLINDER CONTROLS. THE COMBINATION CAN CAUSE AN EXPLOSION AND FIRE.

Repairing and mounting heavy duty tires can be a risky business. A $25^{\prime \prime}$ X $35^{\prime \prime}$ truck tire inflated to 75 pounds per square inch has a potential energy of 578 tons dropped one foot. Anyone who works around tires must respect this explosive potential.

Federal law requires tires to be deflated before repairs on them are started, and "adequate means" (e.g., a steel cage or chains) must be provided to prevent wheel locking rims from creating a hazard during tire inflation ( 30 CFR $55,56,57.9-69$ ).

Hydraulic hoses are essential components of much of the heavy duty mobile equipment used in your operations. If hoses are damaged, the resultant leaks can cause bucket arms, booms, or dump truck bodies to come crashing down.

If you ever get a hydraulic leak on your equipment, remove it from service immediately and make sure it's blocked against motion until repairs are completed. Don't ever work on a piece of mobile equipment in a raised position until it has been blocked in place securely (30 CFR 55, 56, 57.14-29, 30).

Compressed air lines, gas cylinders, heavy duty tires and hydraulic hoses are familiar to all of you. Don't let your familiarity with them breed contempt for their hazards.

[^2]

## H.S.A. SAFETY TOPIC

## WE CAN’TBRINGTHEMBACK

The following are brief descriptions of a few 1989 surface and underground coal mining accidents. There is a lesson to be learned in each accident. Take time out to review at your safety meeting.

## Fatal Case Number 26 -- Asphxiation

Victim was performing preshift examination on the 11:00 PM to 7:00 AM shift. Shortly after 7:00 AM when the victim did not return to surface, a search was begun, Victim has not been seen all shift. Victim was found just inby a man door in a permanent stopping used to prepare an active area from an abandoned, unventilated set of main entries. Victim apparently asphyxiated in this abandoned area which was found to be oxygen deficient.

## Fatal Case Number 27 -- Machinery

Two employees were using chain saws and clearing trees in advance of the surface workings. The victim's chain bar became caught in a cut. Another employee back-cut the tree to free the bar. The tree fell onto the victim and kicked back causing minor injury to the other employee.
Fatal Case Number 28 -- Machinery
Victim was operating the Galion motor grader. While descending down a 12 -degree sloped section of the roadway, the victim lost control of the motor grader. The motor grader left the roadway traveling over a wooden bridge that spanned a stream at the mine entrance. The victim and the motor grader came to a rest 12 feet below the roadway. level in the 4 -foot deep stream resulting in the victim receiving fatal injuries.

## Fatal Case Number 29 -- Powered Haulage

There were no eyewitnesses to the accident. Evidence shows the victim was transporting a generator with a front-end loader which overturned on the mine road and rolled from one level of the roadway to a lower level for a distance of approximately 100 feet and came to rest against a tree. The victim was pinned in the loader and required it two hours to free him. The victim, who was also the hoist operator, was working alone when the accident occurred. When the two underground miners attempted to contact him at 1:00 PM and received no response, they climbed out of the mine and discovered the accident.

## Fatal Case Number 30 -- Powered Haulage

At approximately 3:20 AM, the victim's haulback truck left the backfill road and rolled down an approximately 100 -foot slope to a road on the Jellico coalbed bench. The victim was thrown from the vehicle receiving fatal internal and head injuries. There were no eyewitnesses to the accident; however, employees in another area of the pit saw the "tumbling" headlights of the vehicle as it traveled down the slope.

## Fatal Case Number 31-- Machinery

While tramming the twin head roof bolter to the No. 1 entry face, the offside controls ran into loose coal/rock and caused the panic bar to deenergize the machine. The victim had taken a pry bar and positioned himself over the boom/ATRS trying to free the controls. For reasons unknown at this time, the boom/ATRS raised crushing the victim against the mine roof.

## Fatal Case Number 32 -- Rib Fall

The victim was operating a shuttle on a pillar section. He was positioning the shuttle car under the boom of the continuous-mining machine when a rib roll, measuring approximately 20 inches thick and 30 feet long, occurred, striking the victim and crushing his head between the side of the shuttle car and the rib. He was transported to a hospital where he was was pronounced dead.

## Fatal Case Number 33 -- Fall of Person

At approximately 4:20 AM, a fatal accident occurred when a drill helper apparently fell from the edge of the highwall of the No. 1 pit. According to the driller, the victim left the drill operator's compartment, apparently stumbled and fell over the $100^{\prime}$ highwall. When workers arrived at the bottom of the pit, the victim appeared to be dead.
The investigation is ongoing.

## Fatal Case Number 34 -- Explosives and breaking agents

An explosives accident occurred when explosives were detonated in the No. 1 pit box location resulting in fatal injuries to one employee and minor injuries to a second miner. Both were second shift employees who had not started their working shift and apparently had entered the property without being detected and had just completed discarding a load of garbage and/or trash near an area containing 144 charged boreholes when the charged area was detonated.
Fatal Case Number 35 - Machinery
On August 28, 1989, the victim, a right side operator on the Fletcher twin boom roof drill being used sustained serious head and hand injuries during roof-bolting operations. The roof-bolting operations were being conducted in a crosscut. The victim's head was caught between the drill head boom and the canopy and his hand was caught between the drill head and the mine roof. The victim was transported to the hospital where he expired on August 30, 1989.
Fatal Case Number 36 -- Haulage
The victim was helping lay track and was positioned beside the track, while two other employees attempted to use a six ton battery locomotive to pull a rail car, carrying one 33 -foot long, 60 -pound rail, around a curve. The rail on the rail car struck an electrical box and belt structure causing the rail to swing around striking the victim in the chest. He was transported to the hospital where he was pronounced dead.


THE MINE BICYCLE
The rail mounted cycle was widely used by supervisors where shafts were reacbed from long surface tunnels. Tbese were used underground where sbift bosses beats were too long to reach on foot. Even today the mine rvcle is still in use.
DISTRICT COUNCII. COMPETITION STANDINGS-COAL SURFACE THIRD QUARTER--1989

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Totals


WYO1
NMO
WYO2


Group I uTseg дコムTY גəMOd

N．Indiana Jt．Comm．
Missouri Basin
S．Indiana Jt．Comm．
S．Illinois Open－pit
Southeast ohio
Coal River
Totals
COUNCIL．NAME
Group II
．

## COUNCIL NAME <br> Group III <br> Group III

DISTRICT COUNCIL COMPETITION STANDINGS--COAL UNDERGROUND
$\begin{array}{rrrrrrr}\text { ILO2 } & 0 & 0 & 0 & .00 & 0 & 0 \\ \text { PA06 } & 1,261,510 & 107 & 0 & 16.96 & 1 & 16 \\ \text { WV10 } & 1,253,774 & 108 & 0 & 17.23 & 1 & 31 \\ & & & & & & 15 \\ \text { PA07 } & 1,086,559 & 89 & 0 & 16.38 & 1 & 3\end{array}$
John E. Jones
William "Scotty" Groves
New River Valley/
Winding Gulf
Indiana
Totals
Group I
COUNCIL NAME

> Southeast Ohio
Walter W Kingfish"
Kessler
Coal River
Potomac Valley
Totals

COUNCII NAME
Group III
North Central


WV 111
PA0 8
PA0 5

PA0 3
PA0 4
WY02
PA10
PA0 9
IL0 3
N. Colorado/S. Wyoming

Miller
Raymond A. Gothard
DISTRICT COUNCII COMPETITION STANDINGS--COAI UNDERGROUND

| COUNCIL NAME | CNCL. NUM. | WORK HOURS | ACCI- <br> DENTS | FATALS | INCI. <br> RATES | NO. MEBTINGS | $\begin{gathered} \text { NO. } \\ \text { CHAPTERS } \end{gathered}$ | STANDI | INGS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| group I |  |  |  |  |  |  |  |  |  |
| John E. Jones | IL02 | 5,345,689 | 272 | 0 | 10.18 | 2 | 6.0 | 1 | xxx |
| William "Scotty" Groves | PA06 | 4,214,724 | 254 | 0 | 12.05 | 3 | 12.0 | 2 | xx |
| New River Valley/ Winding Gulf | WV 10 | 3,980,028 | 302 | 0 | 15.18 | 4 | 28.3 | 3 |  |
| Indiana | PA07 | 3,519,331 | 280 | 0 | 15.91 | 6 | 12.0 | 4 |  |
| Totals |  | 17,059,7721 | 1,108 | 0 | 12.99 | 15 | 58.3 |  |  |
| COUNCIL NAPE |  |  |  |  |  |  |  |  |  |
| Group I I |  |  |  |  |  |  |  |  |  |
| Southeast Ohio | OHO 2 | 2,403,172 | 277 | 0 | 6.41 | 7 | 4.0 | 1 | XX |
| walter $\mathrm{w}^{\mathrm{F}}$ "Kingfish" Kessler | ILO 7 | 2,508,621 | 1184 | 0 | 14.67 | 2 | 3.8 | 2 | xXX |
| Coal River | MV02 | $2,523,354$ | 4215 | 0 | 17.04 | 6 | 38.8 | 3 |  |
| Potomac Valley | MDO 1 | 1.590,735 | -136 | 1 | 17.22 | 3 | 5.3 | 4 | XXX |
| Totals |  | 9,025,882 | -612 | 1 | 13.58 | 18 | 51.8 |  |  |
| COUNCIL NAME |  |  |  |  |  |  |  |  |  |
| Group III |  |  |  |  |  |  |  |  |  |
| North Central | WV 11 | 923,174 | $4 \quad 30$ | 0 | 6.50 | 3 | 1.3 | 1 | XXX |
| Kiski Tri-County | PA0 8 | 506,579 | - 17 | 0 | 6.71 | 7 | 7.8 | 2 |  |
| Grove City/Clarion County | PA05 | 76,330 | ) 3 | 0 | 7.86 | 6 | 1.3 | 3 | x |
| Clearfield | PA03 | 23,761 | 1 1 | 0 | 8.42 | 6 | . 5 | 4 | XX |
| Clymer Council | PA0 4 | 218,208 | $8 \quad 13$ | 0 | 11.92 | 3 | 4.0 | 5 | XXX |
| N. Colorado/S. Wyoming | WY02 | 1,179,880 | 073 | 0 | 12.37 | 3 | 3.8 | 6 | XXX |
| Richard Maize | PA 10 | 345,144 | 4.25 | 0 | 14.44 | 7 | 6.5 | 7 |  |
| John O. Miller | PA09 | 619.231 | 1.48 | 0 | 15.50 | 5 | 1.3 | 8 | XX |
| Raymond A. Gothard | ILO 3 | 861,307 | 786 | 0 | 19.97 | 1 | . 3 | 9 | XXX |
| Totals |  | 4,754,614 | 4296 | 0 | 12.45 | 41 | 26.5 |  |  |
| $x$ NO DATA EXISTS FOR A QUARTER |  |  |  |  |  |  |  |  |  |
| $x \times$ CHAPTER AVERAGE IS I | LESS TE | HAN 5 |  |  |  |  |  |  |  |
| XXX NUMBER OF MEETINGS | IS LES | 5 THAN 4 |  |  |  |  |  |  |  |

DISTRICT COUNCIL COMPETITION STANDINGS--METAL/NONMETAL UNDERGROUND

| THHIRD QUARTER--1989 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CNCr. | WORK | ACCI- |  | INCI. | NO. | NO. |
| NU县。 | HOURS | DENTS | PATALS | RATES | MEETINGS | CHAPTERS |

STANDINGS
1 xxx

| 4.473 .489 | 76 | 0 | 3.40 | 3 | 3.8 |
| :--- | :--- | :--- | :--- | :--- | :--- |

$$
\begin{array}{ll}
* & \text { NO DATA EXISTS FOR A QUARTER } \\
\text { ** } & \text { CHAPTER AVERAGE IS LESS THAN } 5 \\
* * * & \text { NUMBER OF MEETINGS IS LESS THAN } 4
\end{array}
$$

Group I
DISTRICT COUNCIL COMPETITION STANDINGS--METAL/NONMETAL
YEAR-TO-DATE
CNCL. HORK
NUM. ACCI-
HOURS
$4,473,489$ 76
WY02

N. Colorado/S. Wyoming
Totals

* NO DATA EXISTS FOR
** CHAPTER AVERAGE IS
*** NUMBER OF MEETINGS


## LAST WORD

## RULES OF THE ROAD

Whether in an in-plant aisle or on the open road, traffic regulations exist to make driving easier and safer for everyone behind the wheel. If part of your job is to operate a powered industrial truck or dolly, you should keep these tips in mind:

Obey all traffic signs, signals and markings.
Keep to the right in aisles.
Maintain a safe distance when following another vehicle.
Be cautious at corners and intersections.

Give wide berth to the edges of ramps and elevated roadways.
Don't pick up passengers -only the licensed driver should ride on the truck and NO ONE should ride on dollies.
Make sure no employees pass under a raised portion of the truck -- loaded or unloaded.
Know safe floor loads and be sure your truck's weight plus the load isn't too heavy.
If you leave the truck or dolly -- fully lower the load, put controls in neutral, put on the brakes and remove the key.
If an accident happens or any mechanical problems develop, report to your supervisor at once.
Remember -- pedestrians have the right of way.

## A NEW YEAR FOR SAFETY

Although the year is new, the basics of a safe work environment remain unchanged. Remember: follow all plant safety rules and signs. Follow instructions and do not take chances. If you're not sure of a procedure or rule, ask.

## SAFE SHOVELING

Winter means snow and snow means shoveling. Snow shoveling can be good exercise if you're reasonably healthy, dress properly and go about it correctly. Wear warm, but lightweight clothes; remember that several light layers are preferable to one heavy coat. Don't shovel until at least an hour after eating. Use a lightweight shovel and coat it with silicone spray to prevent a buildup of wet snow. Lift the shovel with your entire body, making your legs, not your back, do the work.
It's important that you know your limits. Don't work until you're exhausted. Instead, take frequent rest breaks. During these breaks, don't drink (alcohol dulls your sense of fatigue so you won't know when to quit) and don't smoke (as it will constrict your blood vessels). Remember, overwork can cause sore muscles, falls and heart attacks. WINTER ALERT

United States Department of Labor
MSHA
Mine Satety and Health Administration
HOLMES SAFETY ASSOCIATION MEETING REPORT FORM

For the month of $\qquad$

TOTAL meetings held this month $\qquad$

TOTAL attendance this month $\qquad$

Chapter Number $\qquad$ (See address label, if incorrect, please indicate change.)
(Signature)
(Telephone No.)
$\qquad$
(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 $\square$ and return this form.

Please include any change of address below:

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

# 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:

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

Forwarding and
Return Postage Guaranteed



[^0]:    *Excerpted from MSHA'S Guide to Equipment Guarding

[^1]:    *Make check payable to: William H. Hoover, Treasurer
    Holmes Safety Association
    4800 Forbes Avenue
    Pittsburgh, Pennsylvania 15213

[^2]:    *Courtesy of the Cal Quarryman Safety Newsletter, Duluth, Minnesota

[^3]:    $x \quad$ NO DATA EXISTS FOR A QUARTER
    $\mathbf{x x}$ CHAPTER AVERAGE IS LESS THAN 5
    $\mathbf{x x x}$ NUMBER OF MEETINGS IS LESS THAN 4
    xXx NUMBER OF MEETINGS IS LESS THAN 4

