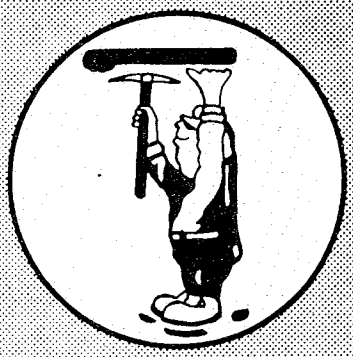
JULY 1981

HOLMES SAFETY ASSOCIATION

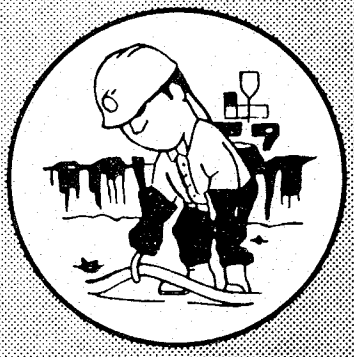
E PLURIBUS UNUM

SAFETY EFFICIENCY

MINERAL INDUSTRIES



BULLETIN

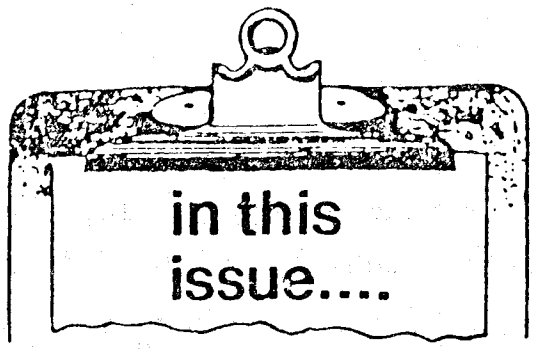


United States Department of Labor

MSHA

Mine Safety and Health Administration

HOLMES SAFETY ASSOCIATION



July 1981

SAFETY HAT DIRECTIONS:
GO ON AHEAD!

July 1981

HIGHLIGHTS

Executive and Regular Meetings

National Council, Holmes Safety Association

The meetings were held in the Madison Room, Quality Inn/Central Motel, Arlington, Virginia, May 27, 1981, with former president, William A. Eastgate, officiating.

Forty-nine delegates from fifteen states, representing the mining, quarrying, metallurgical, mineral-extractive, and allied industries, were in attendance.

Fifteen delegates were called upon for brief activity reports from their respective council areas.

The Association's highest honor for outstanding and exceptional years of service, "The Merit Award," was presented by Acting President Eastgate to the following:

Deward D. Moore, Safety Specialist, MSHA, Lexington, Kentucky;
Harry Thompson, Coal Mine Inspection Supervisor, MSHA, Indiana, Pennsylvania;
Raymond Ashby, Director of Safety, Island Creek Coal Company, Western Kentucky Division, Madisonville, Kentucky;
Sandra L. Socci, Supervisory Clerk-Typist, MSHA, Monroeville, Pennsylvania;
Donald E. Lilley, Director of Health and Safety, Carpentertown Coal and Coke Company, Templeton, Pennsylvania;
James Clem, Director of Safety, Peabody Coal Company, St. Louis, Missouri.

For their sincere and untiring efforts in the promotion of mine safety and advancing the humanitarian activities of the Association, the "Promotion of Safety Award" plaques were presented to the following:

John D. Farley, Training Administrator, Beckley Training Center, MSHA, Beckley, West Virginia;
Kirk D. Harman, Safety Specialist, Beckley Training Center, MSHA, Beckley, West Virginia;
Harold Turner, Coal Mine Inspection Specialist, MSHA, Grundy, Virginia;
Earle M. Rudolph, Coal Mine Inspection Supervisor, MSHA, Washington, Pennsylvania;
George Walaitis, Surface Mine Inspector (Coal), MSHA, Clearfield, Pennsylvania.

Paul Hyatt, Director of Bituminous Deep Mine Safety, Pennsylvania Department of Environmental Resources, accepted the "Presidential Award" in behalf of outgoing president, Walter Vicinelly, Commissioner, Office of Deep Mine Safety, Pennsylvania Department of Environmental Resources.

Elected for the 1981-1982 term were, as president, Willard A. Esselstyn, representing the labor sector; as first vice president, C. William Parisi, representing the management sector; as second vice president, Thomas Shepich, representing the federal sector; as third vice president, Walter Vicinelly, representing the state sector; and as secretary-treasurer, William H. Hoover, representing the federal sector.

Willard Esselstyn, James Clem, and Robert Barrett were elected to represent the Holmes Safety Association on the Board of Directors of the Joseph A. Holmes Safety Association.

Two new members, Kirk Harman and Dave Lauriski, were elected to serve on the executive committee, bringing the nationwide representation to 33 delegates. Charles Jones, retired supervisory mine inspector, MSHA, Wilkes-Barre, Pennsylvania, was elected as a member-at-large.

Acting President Eastgate appointed the following committees:

Finance-Auditing Committee

John Miller (Chair)
Herschel Potter
Robert Vines

Merit-Awards Committee

Robert Barrett(Chair)
William Hoover
John Miller

Nominating Committee

Harry Thompson (Chair)
Earle Rudolph
David Hazlett
John Takacs (Alternate)

Secretary Hoover related the following information in his progress report for 1980:

The National Council headquarters is now servicing 4 state councils, 44 district councils, and 1,574 safety chapters with an overall total of 220,000 miners. The 145 new safety chapters established in 1980 expands the nationwide totals to 1,186 chapters east and 388 chapters west of the Mississippi.

One district council was formed, the Wolf Creek Collieries Council, in eastern Kentucky.

A survey showed 77 chapters were dropped in 1979 and 1980 leaving 1,497 active chapters at the close of 1980.

Nationwide chapters reported 98,333 meetings held with 1,210,359 in attendance. State and district councils reported 186 meetings with 10,383 in attendance. Meetings and attendance showed an overall increase in 1980, as reported to the data center located in Denver.

As of May 15, 1981, 69 new chapter mines and 4 district councils were established. The councils are located in the Pikeville and Barbourville areas of eastern Kentucky. Chapters were established in the state of New Hampshire, leaving only 6 states not being represented by the Holmes Safety Association.

The Association's Bulletin, containing accident abstracts and safety topics on all phases of industrial and mining operations, is utilized at tail-gate and on-the-job safety meetings. It is helpful and instrumental in management's safety programs and is also a positive means in solving many safety problems. The nationwide circulation of the Bulletin is continuously increasing.

The present status of the National, State, and District councils and chapters were highly complimented for their outstanding activities and methods of obtaining improvements in the field of safety by many of the delegates called to the floor.

The delegates were very satisfied with the convienence of the meeting room facilities, lodging, restaurant, and hospitality suite and it was moved and carried that a contract be drawn up with the Quality Inn/Central to hold the 1982 meeting at the same location.

Our appreciation goes to Preiser/MINECO and John Gatens, Manager, for sponsoring the hospitality room and the beverages and also to the Pennsylvania Bituminous Council for their participation.

All other business conducted at the executive and regular meetings will be released in the 1981 Annual Report.

William H. Hoover
National Secretary
Holmes Safety Association

July 1981

MSHA TRAINING FILMS

Address all requests for loans of films or for descriptive catalogs to Motion Pictures, MSHA, 4800 Forbes Avenue, Pittsburgh, PA 15213. Give your official connection with the group before whom the films will be shown. Films are shipped from Pittsburgh by prepaid parcel post only. Films are LOANED FREE of any cost to the borrower--EXCEPT that he must PAY RETURN POSTAGE AND FOR ALL LOSS OR DAMAGE TO FILM.

Only an adult who indicates that he is a responsible person or an official of a responsible organization and who agrees to comply fully with the "Film Borrower's Agreement" may borrow films. Because of divided responsibility, requests for the loan of films on behalf of another person cannot be granted. The demand in the United States for MSHA films is so great that loans cannot be made for more than a maximum of 10 days nor to persons or organizations in foreign countries. However, unless you specify that the film is needed for a period of 10 days (or a period not to exceed 10 days), it will be scheduled for one day only.

Make one or more alternate choices of film subject and designate the dates of showing. If a period is given within which the film can be shown on a definite date to be selected by us, or if alternate choices of dates are stated, the chances of finding a vacancy in the film schedule will be greatly increased. Do not ask when certain films will be available, for films cannot be reserved until a positive request is received giving a date or period within which the film can be shown. If feasible, have requests reach MSHA at least two weeks before the showing. Many films are booked six months to a year in advance. MSHA endeavors to book films so the shipments will arrive at their destinations the day before the showing date.

When planning return of films, the following rate information will be helpful to you. Educational institutions and certain other nonprofit organizations are eligible under the parcel post "library book rate." Coal companies, commercial establishments, individuals, etc., may use the "book rate." Please contact your local Post Office for exact rate information.

Should you wish to purchase any of these films, send requests to the Division of Audio Visual Services, Education and Training, MSHA, 4800 Forbes Avenue, Pittsburgh, PA 15213. Purchase requests must be in writing (preferrably on purchase order forms). No verbal requests are accepted. By purchasing MSHA produced films, you agree that such films will be exhibited in their entirety, will not be shown for profit or commercial purposes, will not be used as parts of other motion pictures, will not be resold, and will not be electronically reproduced.

NO MONEY ORDER, CHECKS, OR STAMPS ARE TO BE SENT TO MSHA. OUTGOING POSTAGE COSTS ARE BORNE BY MSHA.

Should you wish to present these films on television, you must obtain clearance from MSHA. To do so, you may contact Chief, Division of Audio Visual Services, Education and Training, MSHA, 4800 Forbes Avenue, Pittsburgh, PA 15213.

REMINDER:

Borrower pays return postage only.

If films are not returned promptly, your borrowing privileges will be withdrawn. Borrower must agree to all conditions on "Film Borrower's Agreement."

COMPLETE THE FOLLOWING INFORMATION: PLEASE PRINT

School or organization _____

Name and Title _____

Mailing Address _____
(Street) (City) (State) (Zip)

Phone No. _____

MSHA MOTION PICTURE LOAN ORDER FORM

Select the 16mm-sound color film(s) you want from listing below. Insert your preferred showing date, and an alternate in the spaces provided. Complete information requested below, and mail to: MOTION PICTURES, MSHA, 4800 FORBES AVENUE, PITTSBURGH, PA 15213

Showing date	Alternate date	Film Title
		805. Fighting Coal-Mine Fires, 31 min.
		807. Rock Bolting Safety, 17 min.
		808. Roof Bolting in Coal Mines (revised), 19 min.
		809. The Magic of Fire, 23 min.
		810. Oh! My Aching Back, 21 min.
		811. Causes and Prevention of Mine Fires and Explosions, 27 min.
		812. Color for Safety, 22 min.
		813. Orientation and Indoctrination of Safe Workmen, 27 min.
		814. The Care and Use of a Permissible Flame Safety Lamp, 28 min.
		816. Open-Pit Mining Hazards, 17 min.
		817. Set the Pace, 10 min.
		818. Investigation--A Tool for Accident Prevention, 7 min.
		819. Teach Safety, 15 min.
		820. Sell Safety, 10 min.
		821. Safety--A Way of Life, 21 min.
		822. Man and His Habits, 13 min.
		823. Man's Shortcomings, 13 min.
		824. Safety Consciousness, 10 min.
		825. Motivation--A Means to Accident Prevention, 11 min.
		826. Protection Against Radioactivity in Uranium Mines, 27 min.
		827. Fire Fighting in the Mineral Industry, 16 min.
		828. Coal Miner--Today (revised), 14 min.
		829. Coal Dust: Hazards and Controls, 14 min.
		833. Mine Rescue Contest Training, 25 min.
		836. Conveyor Belts--Be Careful, 15 min.
		838. Safety in Surface Coal Mining, 22 min.
		839. Haulage Safety in Low-Coal Mines, 15 min.
		840. Safety Practices in Low-Coal Mining, 15 min.
		841. The Air We Breathe in Industrial Environments, 16 min.
		842. Management's Role in Health and Safety, 15 min.
		843. Emergency Investigation of Coal-Waste Embankments, 16 min.
		844. Mining Noise Hazards, 21 min.
		845. Breathe and Live: Ventilation in Metal and Nonmetal Mines, 21 min.
		846. Artificial Respiration: The First Fundamental, 9 min.
		847. Control of Bleeding: The Second Fundamental, 13 min.
		848. Physical Shock: The Third Fundamental, 9 min.
		849. Open and Closed Wounds (Part I): The Fourth Fundamental, 9 min.
		850. Burns and Scalds (Part II): The Fourth Fundamental, 7 min.
		851. Fractures and Dislocations: The Fifth Fundamental, 11 min.
		852. Transportation: The Sixth Fundamental, 8 min.
		853. Cardiopulmonary Resuscitation, 19 min.

Showing date	Alternate date	Film Title
		854. Cabs and Canopies for Your Safety, 10 min.
		855. Rubber-Tired Haulage, 14 min.
		856. Underground Coal Mine Blasting, 19 min.
		857. Electrical Hazards in Underground Coal Mining, 13 min.
		858. Mine Emergency Operations (MEO), 17 min.
		859. Assume Nothing, 21 min.
		860. In Search of the Facts, 26 min.
		861. Safety on the Move, 16 min.
		862. Front-End Loader Safety, 14 min.
		863. Accident Prevention Through Equipment Guarding, 11 min.
		864. Electrical Lock-Out Procedures, 11 min.
		865. Safety in Longwall Mining, 19 min.
		866. Face Ventilation in Underground Coal Mines, 16 min.
		867. Twenty-Five Feet From The Face, 17 min.
		868. Hazards Around Bins and Hoppers, 16 min.
		869. Safety Practices in Dredging Operations, 16 min.
		870. Slope Stability of Waste Dams and Embankments, 28 min.
		871. Illumination in Underground Coal Mines, 15 min.
		872. Underground Blasting in Metal and Nonmetal Mines, 17 min.
		873. Surface Blasting in Metal and Nonmetal Mines, 18 min.
		874. Why Roof Control Plans[1/]
		TRAINING MODULE FILMS:
		890. Ground Control in Surface Coal Mining, 8 min.
		891. Hazard Recognition and Avoidance in Surface Coal Mining, 9 min.
		892. Transportation and Communication in Underground Coal Mines, 9 min.
		893. Hazard Recognition and Avoidance in Underground Coal Mines, 11 min.

1/Tentative Release: 5/1981

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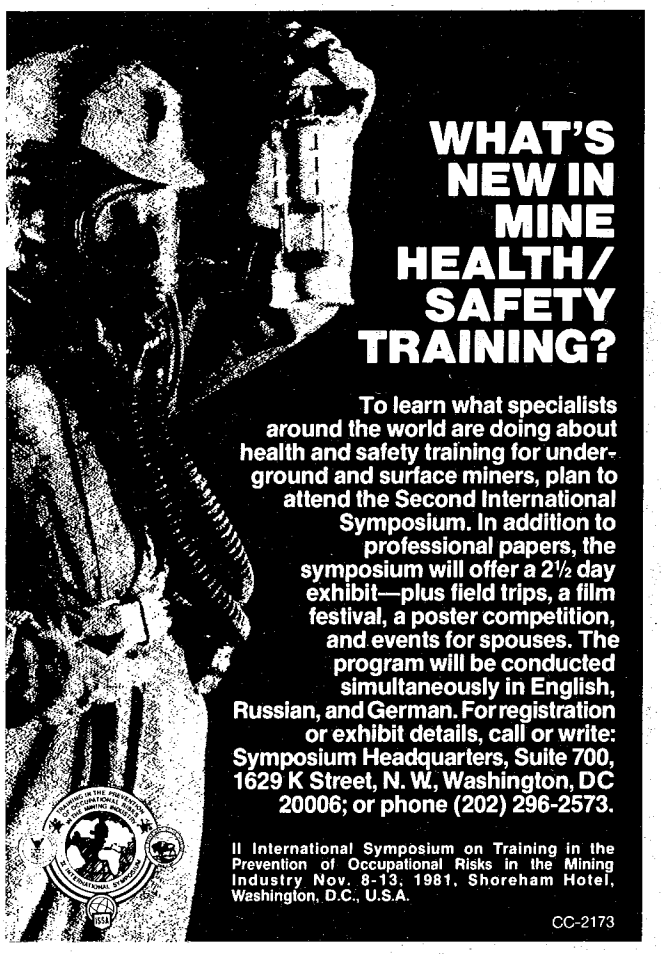

WHAT'S NEW IN MINE HEALTH/ SAFETY TRAINING?

To learn what specialists around the world are doing about health and safety training for underground and surface miners, plan to attend the Second International Symposium. In addition to professional papers, the symposium will offer a 2½ day exhibit—plus field trips, a film festival, a poster competition, and events for spouses. The program will be conducted simultaneously in English, Russian, and German. For registration or exhibit details, call or write: Symposium Headquarters, Suite 700, 1629 K Street, N. W., Washington, DC 20006; or phone (202) 296-2573.

II International Symposium on Training in the Prevention of Occupational Risks in the Mining Industry Nov. 8-13, 1981, Shoreham Hotel, Washington, D.C., U.S.A.

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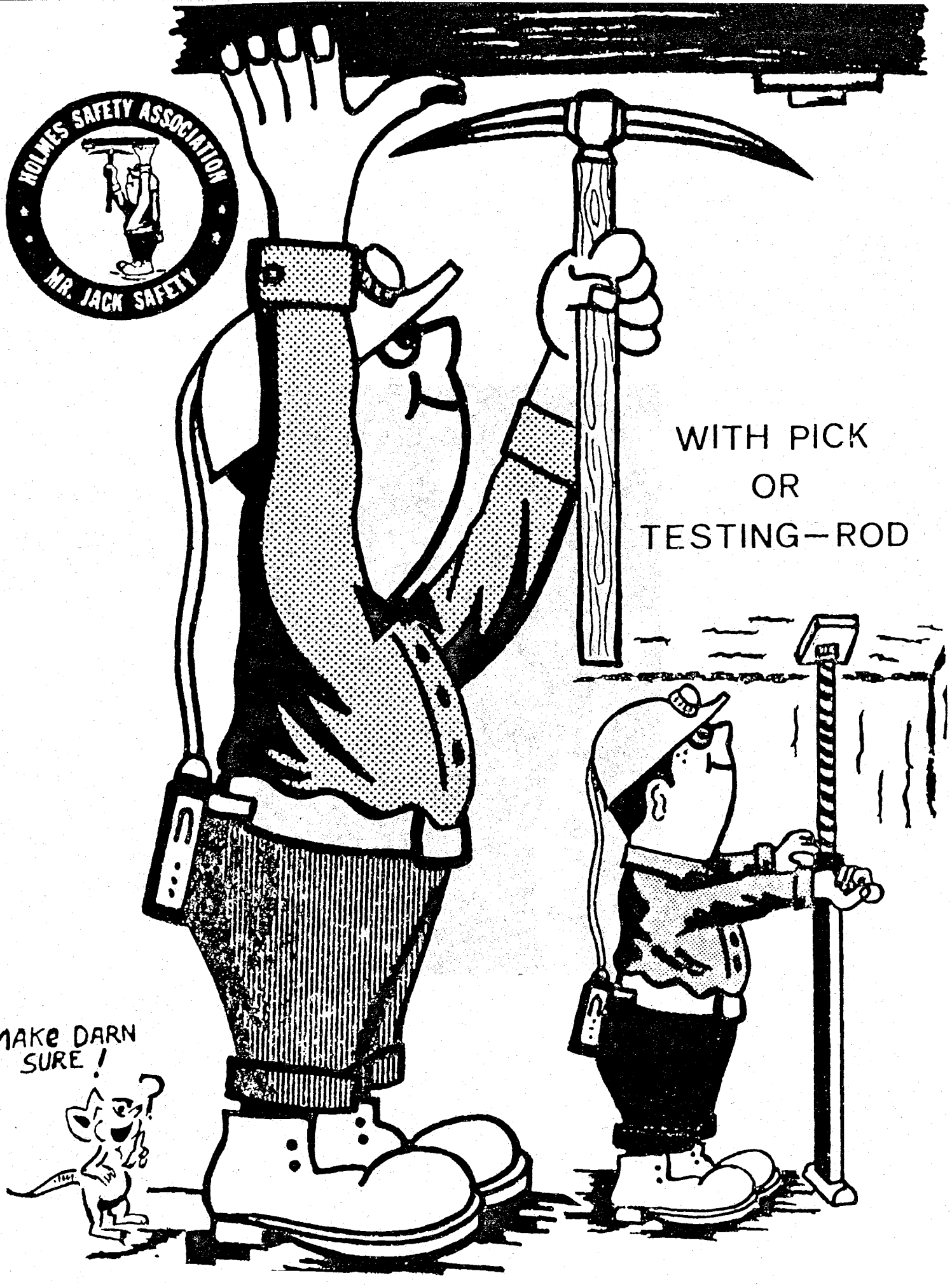

HOLMES SAFETY ASSOCIATION
MR. JACK SAFETY
WITH PICK
OR
TESTING–ROD
MAKE DARN
SURE!

ABSTRACT FROM FATAL ACCIDENT

July 1981

HOLMES SAFETY ASSOCIATION
MONTHLY SAFETY TOPIC

Roof-Fall Accident

General Information: A roof-fall accident occurred at the face of the No. 3 entry of a section resulting in the death of the section supervisor. The victim had 25 years of mining experience with 10 years as a section supervisor.

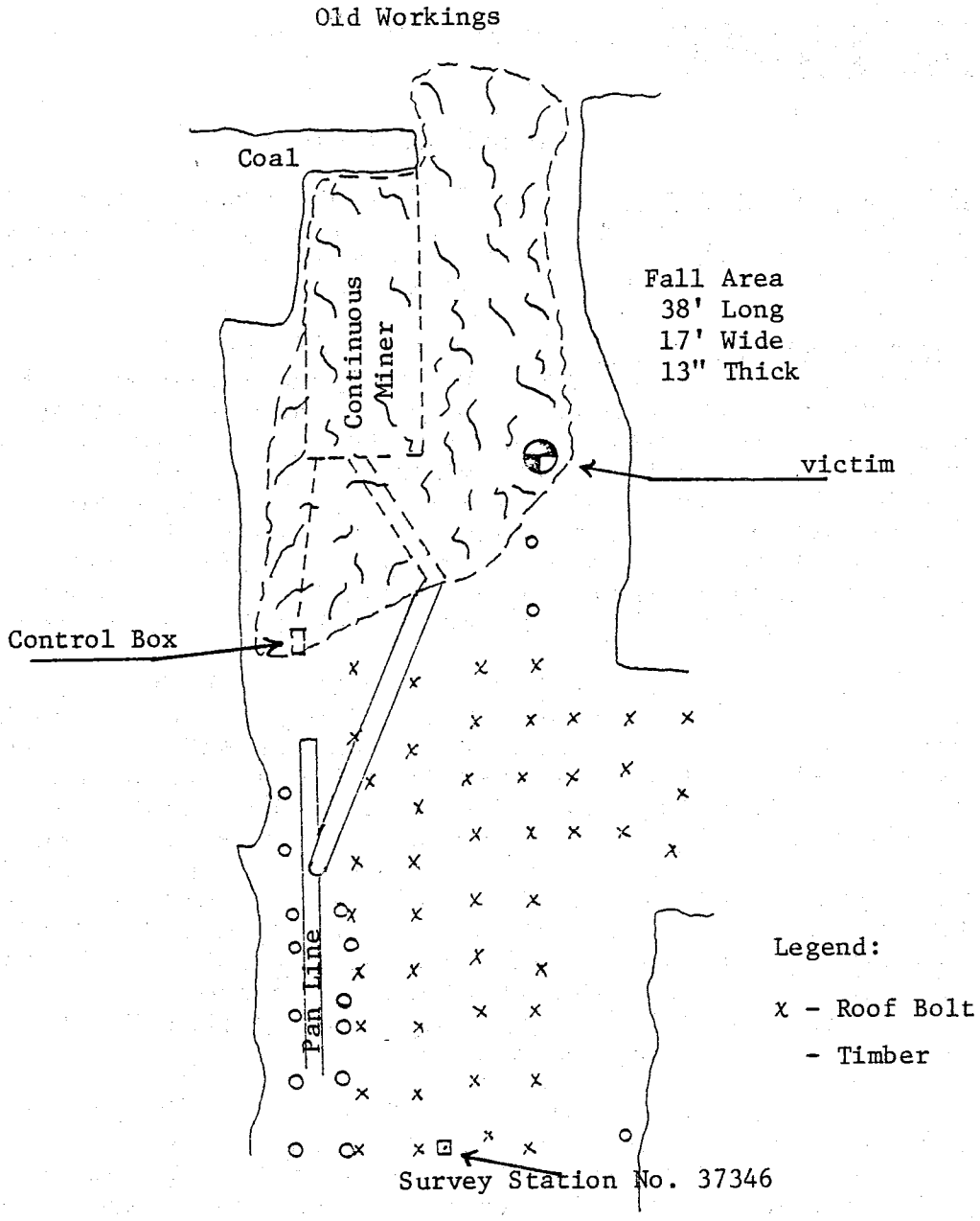
Description of Accident: The section crew, under the direction of their supervisor, entered the mine and traveled to the section. According to the continuous-mining-machine operator, normal mining operations were started and continued until mining had reached the face of No. 3 entry. At that point, due to a dip in the coal seam, the height of the coal had increased from 3 to about 5½ feet. The continuous-miner operator stated that since the machine would only reach to a cutting height of 42 to 44 inches, "top coal" of about 16 inches in thickness was left. Mining continued until the right side of the face holed through into the adjacent area.

The continuous miner was then brought back from the right side of the face and attempts were made to pry or scale the top coal from the roof, but the attempts were unsuccessful. The roof was examined by both the continuous-miner operator and the supervisor and was judged to be smooth and sound. The supervisor then instructed the continuous-miner operator to position the continuous miner on the left side of the face in an attempt to complete the cut. As mining was begun, part of the top coal fell. Mining was continued; the top coal was to be cleaned up after the cut holed through. At that time, the supervisor had positioned himself on the right side of the mining machine inby permanent type roof support to observe the continuous miner hole through. Shortly thereafter, the roof collapsed, striking the supervisor.

Cause of Accident: The approved roof-control plan was not being followed, in that the No. 3 entry was advanced 39 feet inby permanent type roof supports without the protection of temporary-roof supports and the controls of the remote-control continuous-mining machine had been advanced inby the last row of roof supports. The width of the battery tractor roadway ranged from 20 to 21 feet and numerous roof bolts had been installed on 6 to 6½ foot centers. Several roadway posts were not provided with a wooden cap block and many were dislodged.

Conclusion: The accident occurred when the supervisor positioned himself alongside the continuous mining machine, approximately 18 feet inby permanent roof support, in an area not provided with temporary roof supports when the roof collapsed.

(For use in underground coal-mining operations)



REPORT OF INVESTIGATION
(UNDERGROUND COAL MINE)

FATAL ROOF FALL ACCIDENT

July 1981

HOLMES SAFETY ASSOCIATION MONTHLY SAFETY TOPIC

An Abandoned Mine Can Take A Life

Smothered under tons of decomposed granite and debris from the roof above, an amature prospector recently was added to the list of victims of abandoned mines.

In the inexperienced explorer's search for gold, he refused to heed his partner's warning that he should go no further. The explorer's voice soon faded in the underground mine and his adventure in profit seeking ended in tragedy.

Each year, especially during the spring and summer, the Mine Safety and Health Administration stresses that accidents similar to that of the explorer are still occurring at abandoned surface and underground mining properties to trespassers unfamiliar with mining hazards.

Thousands of mines were abandoned before the passage of the Federal Mine Safety and Health Act, which requires the sealing of these mines. Youngsters, prospectors, and curious adults still wander into these properties. The hazardous conditions of these mines are often unknown.

Last August, two men died in a Colorado mine, closed in 1942, when they were overcome by carbon monoxide fumes after they lowered a water pump powered with a gasoline engine into a mine shaft. The oxygen in the small space they occupied was soon consumed and the second victim died in trying to rescue the first.

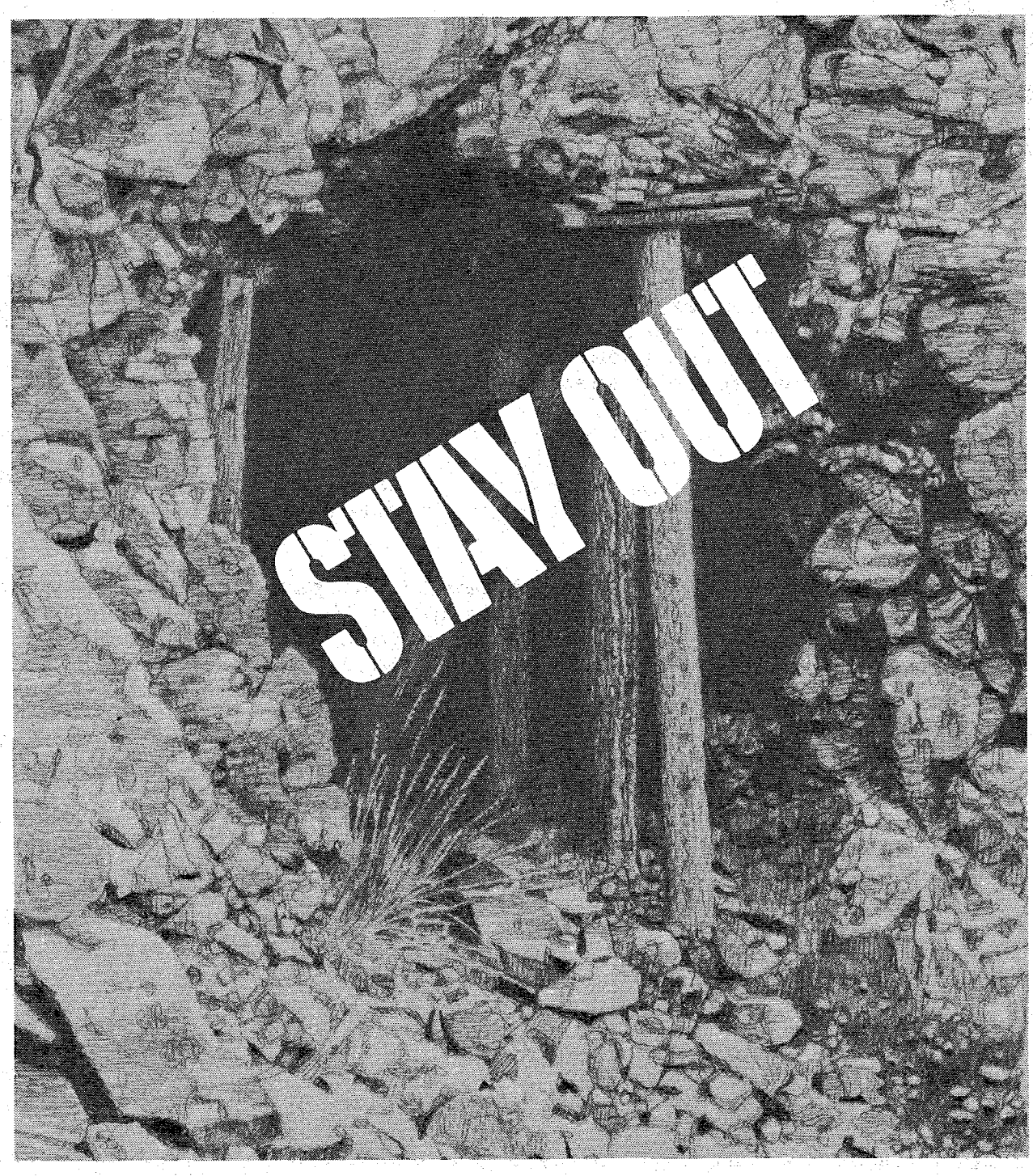
"Adults should steer clear of these properties and alert their children to the potential hazards that exist in abandoned underground mines," warns Thomas Shepich, Acting Deputy Assistant Secretary for MSHA.

In addition to underground mines, abandoned quarries and surface mines present dangers for youngsters who often use them as play areas. Parents should instruct their children about the dangers that exist in these areas, such as falling rock and dirt.

MSHA records indicate incidents where teenagers have been lost for many hours before they were rescued. In some cases, the mines were filled with water and partially caved in.

With today's prices soaring, the enticement of mining for valuable minerals, gold and gemstones becomes stronger. "Unfortunately, people often forget about the potential dangers that exist in these abandoned properties, such as roof falls, explosions, ventilation hazards and drownings," said Shepich.

Abandoned mine hazards cannot be ignored; they are potential death traps.



Abandoned Mines Can Be Dangerous Places to Explore.

Rotted timbers can cave in or fall from above, plunging or crushing victims to death.

Toxic air stagnating inside old mines kills silently but quickly when stirred up.

Abandoned mines are also hiding places for poisonous snakes and other unfriendly wildlife.

Don't let curiosity get the better of you. Stay out of abandoned mines.

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

Printed by this publication as a public service

July 1981

HOLMES SAFETY ASSOCIATION MONTHLY SAFETY TOPIC

Code of Federal Regulations

Sections 77.1400 - 77.1403

Subpart O--Man Hoisting

Subpart O discusses the safety standards as they pertain to man hoists and elevators. Although relatively few man-hoisting accidents have occurred recently, the potential always exists. A rope failure during man hoisting could reach catastrophic dimensions. With proper maintenance and operation, hoists can be exceptionally safe. However, lack of strict attention can invite tragedy.

77.1400--Man hoists and elevators.

The standards set forth in this Subpart O may apply only to hoists and elevators, together with their appurtenances, that are used for hoisting miners.

77.1401--Automatic controls and brakes.

Hoists and elevators shall be equipped with overspeed, overwind, and automatic stop controls with brakes capable of stopping the elevator when fully loaded.

77.1402--Rated capacity.

Hoists and elevators shall have rated capacities consistent with the loads handled and the recommended safety factors of the ropes and cables used.

For the purpose of Section 77.1402, the factor of safety of a mine shaft hoisting rope is the value obtained by dividing the nominal breaking strength of the rope by the calculated total static (dead weight) load. The calculated total static load shall be taken as the weight of the loaded skip or cage added to the weight of the rope extending from the head sheave down to the skip or cage attachment when in its lowest position in the shaft.

The safety of operation depends upon the strength of the rope as it nears the time for removal. It is, therefore, necessary that a value be determined for the minimum factor of safety below which it is not advisable to operate. In general, the time for removal of a rope is indicated by a marked reduction in rope diameter, evidence of excessive abrasion on the outside wires, broken outside wires, or indications of severe corrosion. These factors can all be determined by visual inspection of the outside of the rope. The effect of the broken wires can be estimated by taking into account the number of broken wires and their distribution among the various strands. The number of broken wires which develop in a wire rope is the usual reason for removal. This can be considered the "safety value" that should be evident by visual inspection. The rope lay containing the greater number of broken wires is usually the weakest section of the rope and is comparable

to the "weak link" in a chain, except that the condition is visible. Splices shall not be accepted in hoist ropes that are used to transport persons.

A rope lay is that length of rope in which one strand makes one complete revolution about the core.

Safety Factors for Hoisting Ropes for Shafts When Handling Miners

Length of rope in shaft, feet	Minimum factor of safety for new rope	Minimum factor of safety when rope must be discarded
500 or less	8	6.4
500 to 1000	7	5.8
1000 to 2000	6	5.0
2000 to 3000	5	4.3
3000 or over	4	3.6

Note: Based on total static (dead weight) load.

When sockets are used as end attachments for wire ropes they shall be installed properly and only spelter (zinc) shall be used to fill the socket.

When the thimble clip (clamp) method of attachment is used the proper number of clips (clamps) shall be used in conjunction with the thimble and they shall be spread properly. The saddle of the clip should rest upon the long or main rope and the U-bolt upon the short end.

Standard Shaft Hoist Thimble Clip Attachment

Diameter of rope, inches	Attachment of Clips: Clips, number of	Center-to-center spacing of clips inches*	Length of rope turned back, exclusive of eye, inches**	Length of wrench, inches
1/2	3	3	9	12
5/8	3	3-3/4	12	12
3/4	4	4-1/2	18	18
7/8	4	5-1/4	21	18
1	4	6	24	24
1-1/8	5	6-3/4	34	24
1-1/4	5	7-1/2	38	24
1-3/8	6	8-1/4	50	24
1-1/2	6	9	54	24
1-5/8	6	9-3/4	60	30
1-3/4	7	10-1/2	74	30
1-7/8	8	11-1/4	90	30
2	8	12	96	30
2-1/8	8	13	104	30
2-1/4	8	14	112	30

*Approximately 6 times the rope diameter.
**Measure from nearest seizing.

77.1402-1--Ropes and cables; specifications.

The American National Standards Institute "Specifications for the Use of Wire Ropes for Mines," M 11.1-1960, or the latest revision thereof, shall be used as a guide in the use, selection, installation, and maintenance of wire ropes used for hoisting.

77.1402-2--Maximum load; posting.

The operator shall designate the maximum number of miners permitted to ride on each hoist or elevator at one time; this limit shall be posted on each elevator and on each landing.

77.1403--Inspection and maintenance.

(A) Hoists and elevators shall be examined daily and such examinations shall include, but not be limited to, the following:

(1) A visual examination of the rope for wear, broken wires, and corrosion, especially at excessive strain points;

(2) An examination of rope fastenings for defects;

(3) An examination of the elevator for loose, missing or defective parts;

(4) An examination of sheaves for broken flanges, defective bearings, rope alignment, and proper lubrication; and,

(5) An examination of the automatic controls and brakes required under Section 77.1401.

(B) A report of the daily examinations shall be signed by the person making such examination and the report shall be signed or countersigned by any of the persons listed in paragraph (d) of Section 77.1713.

(C) Empty conveyances shall be operated at least one round trip before hoisting miners after making any repairs.

(D) Alterations or changes in a hoist or elevator which might affect its rated capacity shall be made only with the approval of the Coal Mine Safety and Health District Manager or Subdistrict Manager of the district in which the mine is located.

(E) The ropes and cables of hoists and elevators shall be kept well lubricated from end to end as recommended by the manufacturer.

During inspection of hoists, special attention should be directed to the lubrication of the hoist rope as required by Section 77.1403(e) because wire rope is a fine mechanism and its lubrication during service is of paramount importance if satisfactory life is to be obtained. Wire rope has many moving parts that are all closely and carefully related to one another, and as it operates over sheaves and drums, it is subject to bearing pressure between component wires under loads that are higher than for any machine bearing. The lubricant used by the wire rope manufacturer in fabrication is selected to meet the service requirements to which the rope will be subjected. It is important that the lubricant selected by the mine operator shall be miscible with the original lubricant. Safety of wire rope in service depends upon proper and adequate lubrication.

July 1981

HOLMES SAFETY ASSOCIATION MONTHLY SAFETY TOPIC

Performing Nonroutine Duties

In this safety topic, we will consider those parts of your assigned duties that are not normally routine; for example, when you perform for a short period of time the duties usually assigned to another member of your crew.

On various occasions, you will be asked to perform duties that are not a part of your regularly assigned duties. It is during the time that you are performing these infrequent tasks that your undivided attention is required if you are to prevent an accident from occurring.

Naturally, you will not be asked to perform unfamiliar duties until proper guidance and training has been given, and even then you will need considerable time to gain experience and develop into a competent worker at these new duties. This is as it should be, since no inexperienced individual is expected to "blossom" overnight into, for example, a qualified equipment operator. Patience and training will help you master any new task.

If you are asked to perform nonregular duties, realize that you cannot always plunge headlong into your new job without first reacquainting yourself with the duties and usually performing at a slower pace until your thoughts are in tune with the various steps if the new job. For example, a timbersetter, once a good shuttle-car operator, but not having operated such equipment in several years, will need a period of adjustment before operating the vehicle at maximum efficiency.

When you are reassigned other duties, your supervisor should discuss the total job with you, not to belittle your knowledge of the operation, but to simply refresh your memory concerning certain items or situations especially connected with safety. If you feel unsure about your new duty, ask to be refreshed, especially on the safety aspects.

It is during a period of adjustment that you are more likely to commit an error that might produce an injury. For this reason, you need to "make haste slowly" until your timing and movements are completely centered on your new duties.

July 1981

HOLMES SAFETY ASSOCIATION MONTHLY SAFETY TOPIC

Lightning

The risk of being injured by lightning is greater than you might think. It is estimated that some 1,800 thunderstorms are in progress over the earth's surface at any given moment, and that lightning strikes the earth 100 times each second. On the average, lightning kills about 600 persons and injures about 1,500 persons in the United States every year. The average death toll is higher for lightning than for tornadoes or hurricanes. Property loss caused by lightning--fire and other damage to structures, aircraft damage, forest fires, livestock deaths and injuries, disruption of electromagnetic transmissions, and other effects--is estimated at more than $100 million annually.

Persons struck by lightning receive a severe electric shock, or burns, or both. Proper first aid can sometimes revive lightning victims. Persons struck by lightning carry no electrical charge and can be handled safely.

Keep in mind these rules when lightning threatens:

1. Stay indoors, and don't venture outside, unless absolutely necessary.

2. Stay away from open doors or windows, fireplaces, radiators, stoves, metal pipes, sinks and plug-in electrical equipment like radios, television sets, lamps, and refrigerators.

3. Do not use plug-in electrical equipment like hair dryers, electric tooth brushes, or electric razors during an electrical storm.

4. Do not use the telephone--lightning may strike the outside telephone lines.

If you are outside during a lightning storm:

1. Don't work on fences, telephone or power lines, pipelines, or structural steel fabrication.

2. Don't use metal objects like fishing rods and golf clubs.

3. Don't handle flammable materials in open containers.

4. Stop tractor work, especially when the tractor is pulling metal equipment, and dismount. Tractors in open fields are often struck by lightning.

5. Get out of the water and off small boats.

6. Stay in your automobile if you are traveling. Automobiles offer excellent lightning protection.

7. Seek shelter in buildings. If no buildings are available, your best protection is a cave, ditch, canyon, or under head-high clumps of trees in open forest glades.

8. When there is no shelter, avoid the highest object in the area. If only isolated trees are nearby, your best protection is to crouch in the open, keeping far away from the trees.

9. Avoid hilly tops, open spaces, wire fences, metal clothes lines, exposed sheds, and any electrically conductive elevated objects.

10. If you feel an electrical charge--if your hair stands on end or your skin tingles--lightning may be about to strike you. Drop to the ground immediately.

July 1981

HOLMES SAFETY ASSOCIATION MONTHLY SAFETY TOPIC

Electricity

Electricity, a household friend, furnishes us with heat, lights, entertainment and operates many of the labor saving gadgets we have. Yet, unless it is handled properly, it can be extremely dangerous and even fatal.

To protect yourself,

1. Don't use appliances around water

2. Make sure that all cords are in good condition, not frayed or worn.

3. Don't use excessive appliances on any one outlet.

4. Buy and use certified electrical appliances and materials.

Many homes are not properly wired to handle the great amounts of current used for today's modern influx of appliances. Remember the following danger signs and have your home wiring checked if they occur:

1. Lights flicker or stay dim when is major appliance is turned on.

2. A motor slows down.

3. A fuse blows or a circuit breaker opens.

4. Toasters or irons do not heat properly.

5. The television picture "shrinks."

Remember, under unsafe conditions a

"Kilowatt can become a Killer-watt"

July 1981

HOLMES SAFETY ASSOCIATION MONTHLY SAFETY TOPIC

Summertime Concerns

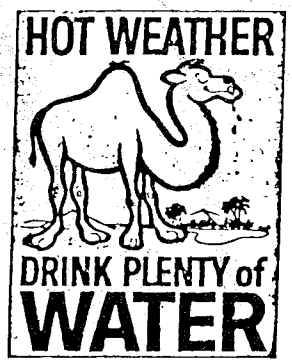
The summer season brings with it its own set of exposure problems; such as heat exhaustion, heat cramps, sunstroke and sunburn. Heat exhaustion is collapse from the effect of heat--the sun or any other source. It results from excessive loss of water and salt from the body and is caused by heavy sweating. Dizziness and faintness are symptoms and the victim is pale with moist, cool skin. For first aid, remove the victim to shade, lay the victim down with the head lower than the body, remove or loosen tight clothing, and if conscious give cool salt water (½ teaspoon of salt in a glass of cool water) to drink. DO NOT USE ICE WATER.

Heat cramps are painful spasms of muscles, especially those of the abdomen and limbs, which occur after prolonged exposure to high temperature while engaged in strenuous labor or play. Prevention of heat cramps is much more important than treatment, which is usually medical. When working or playing in high temperature, one should drink adequate amounts of cool water (10 to 15 glasses a day) to replace the fluid lost in perspiration and at the same time replace lost salt by adding a pinch of salt to each glass of water or by taking salt tablets.

Sunstroke is a sudden attack of illness from prolonged exposure to the direct rays of the sun or to other high temperatures without exposure to the sun. The attack is sudden and the victim becomes unconscious rapidly. The face is red and flushed and the skin is hot and dry with no perspiration. Breathing is labored and of a snoring type and the pupils of the eyes are enlarged but of equal size. For first aid, remove the victim to a cool place and lay down with head raised and take off as much clothing as necessary to cool the victim down. Apply cool applications and if ice is available, rub the body with the ice. GIVE NO STIMULANTS.

In all of the above instances, obtain medical help immediately.

Serious sunburn may be prevented by limiting the first exposure to the sun to 10 to 15 minutes. Remember that exposure should always be gradual, especially for those with fair skin. Sunburn can occur on cloudy days as well as sunny ones and of course the effect of the sun is greatly increased over water. There are many standard suntan lotions that can be used while in the sun and many pain relievers for mild sunburn. If, however, one develops a severe sunburn, it is recommended that medical care be obtained.



DANGER

STAY ALIVE BY STAYING OUT

PELIGRO

NO ENTRE ALARGUE SU VIDA

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