

HOLMES SAFETY ASSOCIATION

BULLETIN

April 2001



INSIDE:

- ✓ *"Remember!", Stay Out–Stay Alive*
- ✓ *Haulage Safety Attitude*
- ✓ *MSHA Hazard Alert-Water Trucks*



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The Holmes Safety Association Bulletin contains safety articles on a variety of subjects: fatal accident abstracts, studies, posters, and other health and safety-related topics. This information is provided free of charge and is designed to assist in presentations of groups of mine and plant workers during on-the-job safety meetings. For more information visit the MSHA Home Page at www.msha.gov.

Please Note: The views and conclusions expressed in Bulletin articles are those of the **authors** and should not be interpreted as representing official policy or, in the case of a product, represent endorsement by the **Mine Safety and Health Administration**.

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“Remember!”



Mine Hazard Awareness Campaign Coming Soon!

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Stay Out— and Stay Alive

Every year, dozens of people are injured or killed while exploring or playing on mine property. Consequently, the U.S. Department of Labor's Mine Safety and Health Administration (MSHA) created "Stay Out—Stay Alive," a public safety campaign to educate children and adults about the existing hazards at active and abandoned mine sites.

Mining is a fundamental component of the American economy. Over half of the electricity generated in the United States comes from coal.

Sand, gravel, limestone and other rock products are used in the construction industry. Salt keeps wintry roads free of ice. Gold, silver, iron, copper and many other minerals are essential to our national prosperity.

Mines are located in every state—from small sand and gravel operations to complex underground coal, salt, limestone or metal mines, to extensive surface operations that use some of the largest indus-

trial equipment ever built. There are about 14,000 active and as many as 500,000 abandoned mines in the nation. As cities and towns spread into the surrounding countryside and more people visit remote locations, the possibility of contact with an active or abandoned mine increases.

Dangers Exist at Active and Abandoned Mine Sites

The men and women employed in our nation's mines are trained to work in a safe manner. For the unauthorized explorer, hiker, off-roader or rockhound, however, the hazards are not always apparent. Active and abandoned mine sites have proved to be an irresistible—and sometimes deadly—draw for children and adults.

- ❖ Vertical shafts can be hundreds of feet deep. At the surface, they may be completely unprotected, hidden by vegetation or covered by rotting boards.

- ❖ Horizontal openings may seem sturdy, but rotting timbers and unstable rock formations make cave-ins a real danger. Darkness and debris add to the hazards.

- ❖ Lethal concentrations of deadly gases (methane, carbon monoxide, carbon dioxide and hydrogen

sulfide) can accumulate in underground passages.

- ❖ Unused or misfired explosives can become unstable and deadly—vibrations from a touch or footfall can trigger an explosion.

- ❖ Excavated vertical cliffs (highwalls) in open pit mines and quarries can be unstable and prone to collapse.

- ❖ Hills of loose material in stockpiles or refuse heaps can easily collapse upon an unsuspecting biker or climber.

- ❖ Water-filled quarries and pits hide rock ledges, old machinery and other hazards. The water can be deceptively deep and dangerously cold. Steep, slippery walls make exiting these swimming holes extremely difficult.

Any community with active or abandoned mines, quarries or pits could become the scene of the next tragedy. For more information on "Stay Out—Stay Alive" or how to become a partner in this campaign, contact the Mine Safety and Health Administration at (703)235-1454. MSHA's toll-free hotline for reporting unsafe access to mine sites is 1-800-499-1038.

MSHA's web address is www.msha.gov.



Coal Mine Roof Bolter Operators and Helpers

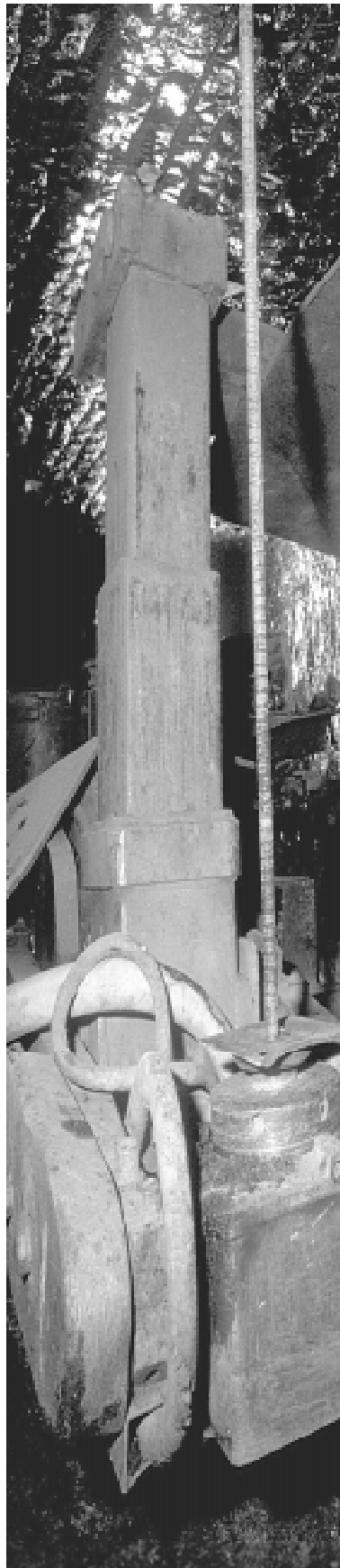
INBY IS OUT!

Accidents involving roof bolter operators and helpers continue to cost lives, disabilities, and lost work days. Injuries and fatalities to roof bolter personnel usually result from:

- Traveling inby roof support.
- Improper hand/body positioning when setting up or installing roof bolts.
- Failure to follow the requirements of approved roof control plan.
- Inadequate/improper testing and examination of the mine roof.
- Improper lifting techniques when handling materials and performing maintenance or repair.
- Failure to use proper tools and equipment when scaling roof or ribs.
- Failure to use personal protective equipment.

To prevent these types of accidents, roof bolter personnel should:

- Never travel inby roof support except to install temporary supports.
- Avoid pinch points, especially near the boom,



ATRS and canopy. Avoid hand placement on rotating drill steel or body positioning between ribs and equipment.

- Know and follow the provisions of the approved roof control plan.

- Always properly test the mine roof and installed supports. Notify mine management and other miners of any observed hazardous conditions. Make sure the area has been properly examined by certified personnel before entering.

- Use proper lifting techniques. Don't attempt to lift too much weight. Get assistance when needed.

- Always use proper tools and equipment for the job to be done. Use proper length bar when scaling roof and rib.

- Use personal protective equipment.

MSHA - POST ACCIDENT
INVESTIGATION REMEDIES**“Safety Practices - Don’t
Leave the Ground
Without Them”**

Recently a 38-year-old mechanic with 6 years mining experience was fatally injured at a sandstone mine. The mechanic fell approximately 59 feet from a suspended work platform to the pit floor. The mechanic was kneeling beneath the top handrail, and leaning out of the platform. He lost his balance as he attempted to lift a bucket of water being handed to him by an employee standing below him on a fixed platform. The mechanic was not tied off.

MSHA highly recommends using the following safety equipment and practices when working from platforms suspended by cranes or derricks:

Use a full body harness with the lanyard secured to the suspended platform or above the crane hook or ball.

Inspect the crane or derrick prior to suspending a work platform.

This should include inspection of the wire rope, hoist drum brakes, boom



Use a work platform approved by a qualified engineer

and other mechanical and rigging equipment vital to the safe operation of the crane or derrick.

Use a work platform approved by a qualified engineer and rigging approved by a qualified person.

The platform should be equipped with an access gate. The access gate should swing inward, and should be equipped with a positive locking latch.

Platform perimeter protection consists of:

- ◆ a top rail approximately 42 inches above the floor,
- ◆ a toeboard at least 4 inches high, and
- ◆ a midrail approximately halfway between the top rail and the toeboard.

The platform is to be positively locked to the load block or hook in a

manner that prevents accidental disengagement.

For additional information on industry accepted safety standards on suspended work platforms, reference American National Standards Institute (ANSI) A10.28-Safety Requirements for Work Platforms Suspended from Cranes or Derricks. This standard or other safety standards can be purchased directly from ANSI by clicking on the ANSI graphic link that goes directly to the ANSI Standard Information web page.

The mining industry is strongly encouraged to consider and adopt these practices. MSHA believes that unnecessary injuries and fatalities could be avoided in the future as a result.



HAULAGE SAFETY ATTITUDE

Every miner who operates a surface haulage machine needs to develop a **Zero Compromise Toward Safety** attitude.

You should not tolerate unsafe mechanical or operational conditions that could jeopardize your safety on or around the haulage equipment you are operating.

Listed below are some attitudes (philosophies) that successful surface haulage operations have tried and proved to be “Best Practices.” Some may require a lot of intensive preparation, time, resources, and training to adapt to your location. You may be doing some or parts of them now, and some you may not be able to use.

You have the legal right and responsibility to have conditions hazardous to yourself and others corrected.

You must ensure that the haulage machine being used is mechanically ready to operate.

Your knowledge of, and ability to interpret the performance of the vehicle is directly proportional to

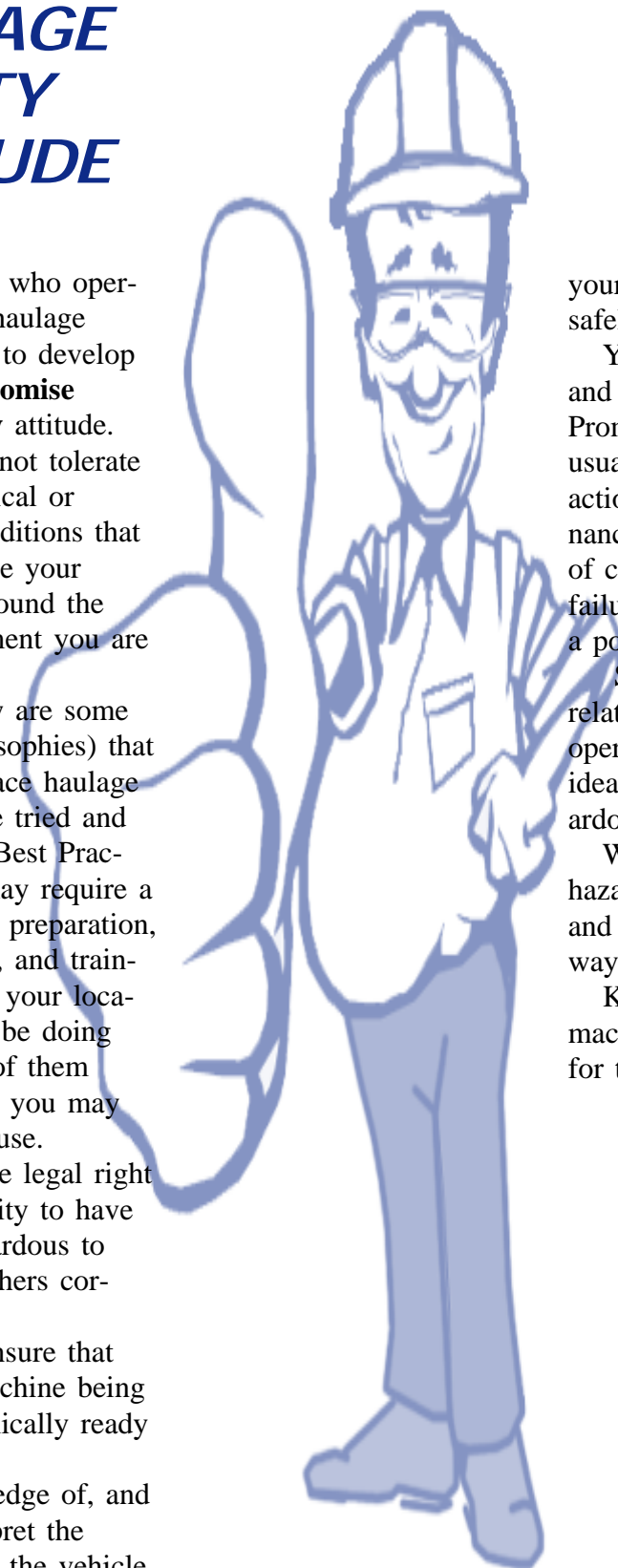
your ability to operate it safely.

You are the eyes, ears, and pulse of the operation. Prompt reporting of unusual noises, conditions, actions, etc., to maintenance reduces the chances of catastrophic equipment failure which may result in a potentially fatal accident.

Safety and maintenance related pre-and post-operational checklists are ideal tools to report hazardous safety conditions.

Watch for and report hazardous conditions in and around haulage roadways.

Keep the cab of the machine clean and orderly for the next operator.



APRIL

*Directorate of Technical Support
Accident Reduction Program-
Accident Buster Awareness Tip*

"IF YOU CAN SEE IT - FLEE IT; IF YOU CAN HEAR IT CLEAR IT."

Safety Tip: This is the National Lightning Safety Institute's slogan for "Lightning Safety."

Over a hundred people die each year from lightning strikes. Recently a coal-barge loader was fatally injured when he was struck by lightning. He was located three barges, or approximately 200 feet, from the river bank when a dark cloud mass came over a nearby hill. Workers nearby observed the victim being struck by a bolt of lightning before any rain fell.

Here are some general lightning-safety tips:

When you first see

lightning or hear thunder, plan to go to the nearest covered building or enclosed car or truck. Lightning will often precede rain. If possible, don't wait for the rain to begin to

find shelter.

If caught outdoors, avoid water, high ground, open spaces, solitary tall trees, and metal objects. If shelter is not available, you should:

- ✦ Crouch down with both feet together. Do not lie down or place your hands on the ground.

- ✦ Avoid proximity to other people. Keep a minimum of 15 feet away.

If you are outside and you feel your hair stand on end, this is an indication that lightning is about to strike. You should bend forward, putting your hands on your knees.

Inside of a shelter, stay away from doors, windows, and again avoid water. Electrical appliances (e.g., computers, power tools) should be turned off and unplugged. If appliances can't be unplugged (e.g., telephones), stay away from them.

Persons injured by lightning do not carry an electrical charge and can be handled safely. Administer first aid to a lightning victim if you're qualified to do so. Send for help immediately.

For more detailed information on lightning safety, several web pages are available. An example is "Thunder and Lightning

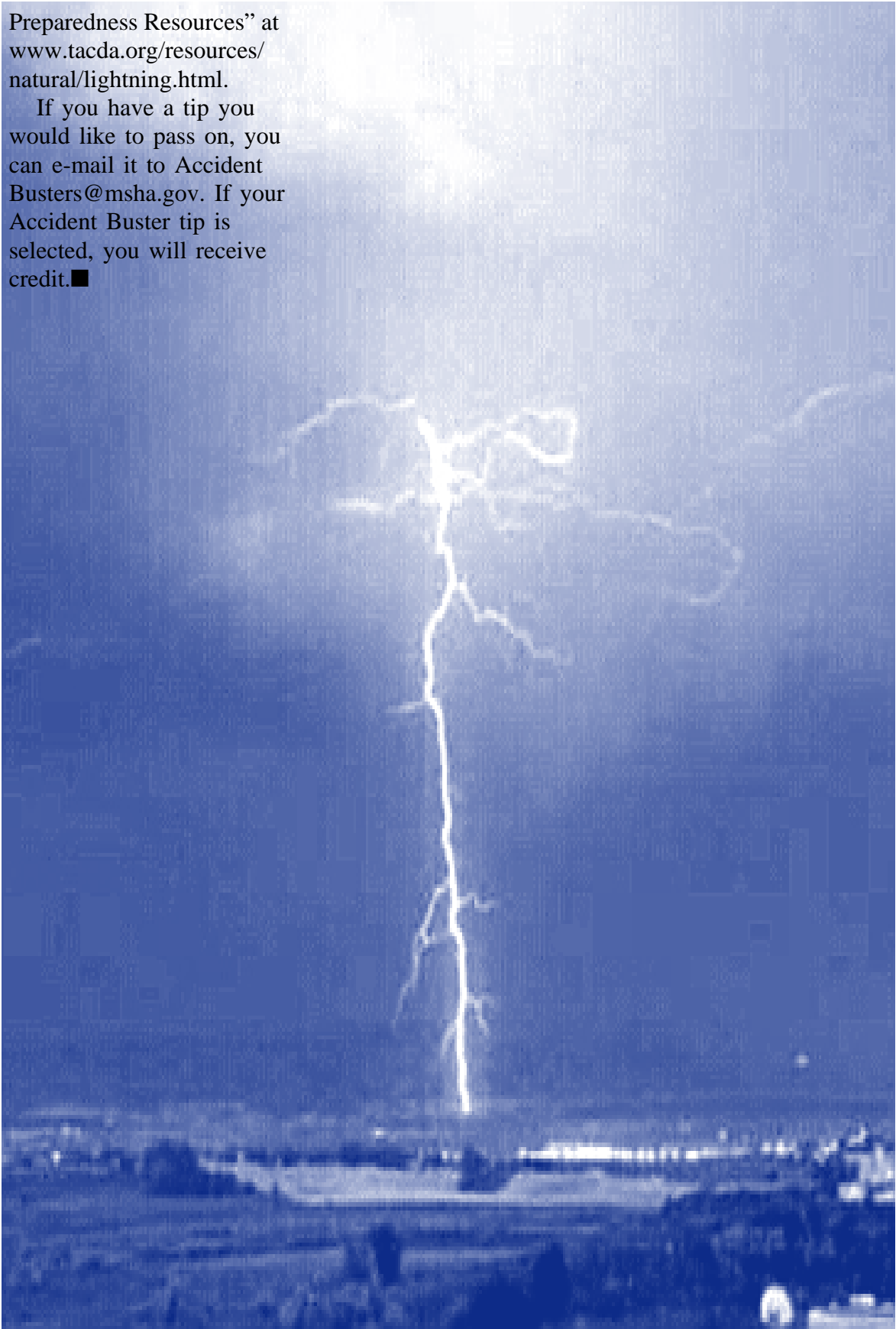


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Preparedness Resources” at www.tacda.org/resources/natural/lightning.html.

If you have a tip you would like to pass on, you can e-mail it to AccidentBusters@msha.gov. If your Accident Buster tip is selected, you will receive credit.■



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HOLMES SAFETY ASSOCIATION



MSHA HAZARD ALERT

Water Trucks

During the past five years, five miners were fatally injured while operating water trucks at coal and metal and nonmetal surface and underground mines.

✧ A water truck operator was thrown from the operator's cab when the truck went through a berm and over an embankment.

✧ During a night training session, a new truck driver rolled the truck over the edge of a shallow embankment. The operator was crushed.

✧ A water truck operator, while descending a pit ramp, lost control of his vehicle and rolled it over several times.

✧ While descending a hill, a water truck operator lost control of the truck and crashed.

✧ A water truck, at an underground operation, was backed into an open stope and went over the edge. The operator was thrown from the vehicle.

These types of accidents can be eliminated if mine operators and water truck drivers do their part.

Mine Operators

✓ Ensure that trucks used to carry and dispense water are safely operated at the mine.

✓ Construct safe haul roads by using safe grades and proper berms, posting speed and hazard information signs, and when necessary, providing escape ramps.

✓ Confirm that regular truck maintenance is performed, making sure braking systems are maintained according to manufacturer specifications.

✓ Verify that task training is provided to all water truck operators.

Drivers

✓ Always perform pre-operational checks before putting a water truck in operation.

✓ Never operate any water truck without a thorough understanding of traffic rules at the mine site as well as safe operating procedures of the truck.

✓ Use all safety equipment including seat belts.

Do Your Part - Be Safe

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100-TON OR LESS TRUCK PRE-OPERATION INSPECTION

Many accidents involving on/off road trucks could have been avoided with a thorough pre-operation inspection. A thorough pre-operation inspection takes very little time and effort, but can greatly reduce the frequency and severity of accidents.

Use an inspection checklist to help identify safety hazards and operational readiness of the machine you are operating. The checklist should include but not be limited to the following:

Personal Safety Items

- Always wear appropriate personal protective equipment, i.e., hard hat, safety boots, safety glasses or goggles, hearing protection, gloves and dust mask or respirator.
- Don't wear jewelry that may get caught on controls or other machine parts.

Before checking fluid levels, park the machine on flat ground, chock the wheels and set the parking brake. If the machine is loaded, avoid getting under the load.

External Checks

- Make sure the access ladder is free of debris, securely fastened to the truck, and in general good condition. After confirming its condition, climb the ladder to the cab.

CAUTION: Use the handrails, face the ladder and maintain the “three-points-of-contact” (2 feet and 1 hand or 1 foot and 2 hands) whenever climbing or descending the boarding ladder or steps.

- ✓ Clean cab windows, and adjust and clean all mirrors.
- ✓ Switch “on” all exterior lights including the emergency flashers (if so equipped). The lights should be checked during the inspection to ensure that they are working.
- ✓ Return to ground level and continue the inspection.
- ✓ Do not smoke while making an inspection; many fluids, lubricants, etc. are potential explosive hazards.
- ✓ Ensure that all lights are illuminated. Clean lenses if necessary.
- ✓ Visually inspect the underside of the truck for indications of damage and leakage. Make sure fuel, coolant, grease, hydraulic hoses, etc., are free of kinks and cracks, and secured away from moving parts.
- ✓ If you are required to

check fluid levels, be sure that the grab irons, hand holds, steps, ladders, service platforms, etc., are free and clear of mud, ice, snow, and debris.

Check for proper levels of engine, transmission, hydraulic, coolant, and battery fluids.

- Remove from the engine compartment any trash, tools, rags, etc., that could jam controls, damage the engine, or cause a fire.

- Visually inspect the condition of the radiator. Ensure that it is free of debris that could interfere with its cooling capability.

- See that all engine drive belts are in good condition and fan guards are in place.

- Ensure that the air ducting from the filter assembly to the engine is not cracked, missing, or has holes in the rubber connections. Note: This is a critical inspection item. If the engine takes in unfiltered air, extensive damage to the engine will occur.

- Check suspensions, shock struts, leaf springs, etc., for proper inflation, leakage, or damage.

- Check externally mounted fire extinguishers or fire suppression system components for condition and serviceability. Make sure that you know how to operate them in an emergency.



- Visually check steering system components for evidence of leaks or damage.

- Visually inspect all tires for deep cuts, missing chunks, and proper inflation; wheels and rims for missing or loose lug nuts and cracks. If there is any abnormal bulging or tread/sidewall separation immediately move away from the tire and notify the appropriate supervisor.

If equipped, visually inspect the main air supply tank and lines. Drain any moisture from the tank using the appropriate draining procedure.

Visually inspect steering system components: ball joints or clevis assemblies, tie rods, bell cranks, and steering cylinders. If any piece is damaged or leaking, do not drive the truck. Report the condition immediately.

On trucks equipped with an automatic lubrication system, check for leaks throughout the system, and ensure that the level of the lubricating grease in the main supply reservoir is adequate.

Operator's Cab

- Remove or secure trash, tools, or any loose objects which could jam a control or prevent the operator from performing a critical control function.

- Adjust the operator's seat to the best driving

position for maximum comfort and safety.

- Clean mirrors and windows, and adjust mirrors for maximum visibility.

- Check gauges and warning lights before starting the engine and after the engine is running for proper warnings and indications.

Turn "ON" the master switch, or any other switch(s) required to start the engine.

- Be sure that the:

- ✓ Parking brake is "set."

- ✓ Transmission/shifter is in "neutral."

- ✓ Starting air pressure adequate (on air start trucks).

- ✓ Circuit breakers are all in the operating position (pushed "IN").

- ✓ Appropriate "AID" or other auxiliary warning indicators flash and alarms sound.

- ✓ Engine function gauges and warning lights are working.

- If equipped, verify the operation of the secondary (emergency) steering and braking systems.

- Warn any people in the area that you are going to start the truck. Make sure they are clear of the truck, sound the horn, and wait an appropriate amount of time before starting the engine.

Starting the Engine

Do not accelerate a cold engine. Allow the engine to idle until coolant temperatures show that the engine is warmed up. If the engine does not start, refer to the appropriate engine manual for additional instructions.

- As soon as the engine is started and operating, check all gauges and indicators for proper reading.

Make sure that windshield wipers are working.

- Check the service brakes for operation. Apply and hold the brake pedal, feel for pedal movement, and make sure there is no drop in brake pressure once the brakes are applied.

- Ensure the area around the machine is clear, and check all braking systems according to the manufacturer's recommendations.

- When the engine coolant temperature, oil pressure, system air pressure, and amperage and voltage levels reach normal operating ranges, the truck may be put into operation.

Complete required inspection reports. Report mechanical problems and

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safety hazards immediately, and most of all, do not operate an unsafe machine.

Proceed with caution and follow all haulage safety rules and procedures. ■



Haul Roads a Path to Mine Safety

Article written for the March 8, 2001 "The Miner's News"

by Harold Hough

When it comes to mine safety, many mine managers think in terms of equipment, operators, and natural hazards. Few think about mundane things like haulage road design. Traditionally, haulage roads are usually designed to lower

haulage costs, limit maintenance costs, and optimize ore transportation. Yet, a well designed haulage road can not only save lives, it can limit damage and lost hours due to accidents.

One of the biggest problems today is the growing size of haul trucks.

Trucks today carry two to three times as much material as they did just a few years ago, and as these trucks have grown, they require more road space, gentler curves, and more visibility. Yet, many mine managers forget that as their standard hauler grows, the margin of safety on the road decreases.

Unless you drive a haul truck, you probably don't recognize the visibility problems that face the driver. In a 10-ton truck, the driver is unable to see a six-foot man 70 feet away on the right side of the truck. The ground isn't visible until 105 feet away. In front of the truck, a six-foot man isn't visible until 40 feet away and the ground isn't visible until 62 feet away. The problem only grows worse with larger trucks. In a 240-ton truck, you can't see a pickup at 60 feet or the ground at 200 feet!

Although haul truck manufacturers try to eliminate blind areas with a

network of mirrors, they can't alleviate the problem. The side mirror on the right side of a 360-ton hauler is the size of a portable TV screen placed on the other side of a large room. Yet, how many of us can get a lot out of watching a football game on a small TV from across the room. Obviously, neither can a truck driver see every hazard that shows in his rear view mirror.

The key to building a safe haulage road is to take these visibility problems and the size of the equipment into account. One example is to make haulage road curves (both vertical and horizontal) gentle enough that the truck driver can see any threat on the road and react in a safe manner. In the case of a road that has to go over a crest, the vertical curve needs to be gentle enough that from this higher position, the driver can see any problem and easily stop. In cases where a road can't curve in such a manner, many mines put up large mirrors so the drivers can see around the corners. Of course, like the side mirrors on a large hauler, a large mirror on a curve 100 feet ahead doesn't provide a perfect view.



MAKING ROADS SAFE AND WIDE

Safety also requires a wide road. Although MSHA doesn't have a rule for road width, the MSHA Haul Road Inspection Handbook does have haulage road width recommendations. For a one way road, it recommends calculating the width of the widest vehicle to travel the road and then adding half the width on each side for open area. Therefore, a haulage road that will handle 20-foot-wide haul trucks needs to be 40 feet wide. The rule of thumb is to double the width of the widest vehicle traveling the road.

Two way roads follow the same principle, but the margin on the inside of the road can be shared by both vehicles. Therefore, a road designed for two way traffic for 20-foot-wide vehicles can be 70 feet wide (40 feet for the two vehicles, 20 for the margin on the side of the roads, and 10 for the margin in the middle of the road). The rule of thumb for two way traffic is three and one-half times the width of the widest vehicle traveling the road.

Although (the two times and three and a half times rules are valid for straight-aways, the road designer must remember that large

vehicles require wider curves because the back wheels don't follow the front wheels in a turn.

The biggest challenge for the road designer is in open pit mining, where long steep haulage roads present several dangers to the drivers and other vehicles on the road. In addition to worrying about avoiding blind areas and widening curves, designers have to consider highwalls, berms, soil condition on a slope, and grade.

Since highwalls are unstable, a road designer must avoid them because the threat of a landslide is too great. Although designing an open pit with a gentler slope will cost more, the reduced slope on the highwalls will considerably lessen the threat of landslides.

A gentler slope will also make it easier for equipment to travel the open pit grade and reduce accidents. It is imperative for road designers to check all the operator manuals to see what type of slope is allowed for operation. It's also imperative not to confuse measuring slope in degrees and percentages because it can make a difference between life and death. For instance, a 10 degree slope is a 17.06% slope. If you confuse them, you can design a road too

steep and dangerous for your equipment.

Changing the rules of the road can also make the road safer. If your current operation puts loaded trucks on the outside edge of a road as they leave the pit, you can improve overall safety at the operation just by making the traffic stay on the left hand side of the road instead of the traditional right side. This will put the empty trucks on the outside edge, and since they are lighter, there is less chance of the road giving away under the weight.

Although many mines just leave the design of a road to the dozer operator, it is critical to plan for your haulage roads in advance. Not only can preplanning make the road faster and cheaper, it can make your mine much safer.■

MSHA Provides Training on the Website

“Underground Electrical Safety”

MSHA has an Underground Electrical Safety Training Site on the worldwide web. The program will discuss some of the more common types of electrical hazards that may be found in underground mines. While being of benefit to certified electricians as a review, this program deals with basic electrical safety and is intended for the general underground mining population. This electrical awareness program consists of two parts that are designed to be presented consecutively. Part 1 of the program is an 18 minute videotape entitled “Underground Electrical Safety” while Part 2 consists of a set of question and answer slides available in Microsoft PowerPoint® format. We are providing you with the PowerPoint® presentation which may be viewed or downloaded using your internet browser (you will need IE 5.0 or higher to view the presentation in your browser). We have also converted the PowerPoint® presentation to HTML which may be viewed in any browser that supports frames.

Objectives

- ✓ Make the viewer aware of some of the electrical hazards that can exist in underground mines
- ✓ Reinforce basic electrical safety concepts
- ✓ Develop the observation skills necessary to recognize electrical hazards
- ✓ Demonstrate knowledge gained by participating in a question and answer session at the conclusion of the program

Target Audience

- ✓ General underground mining population



An Electrical Awareness Training Program Streaming Video on the Web

This videotape gives an overview of:

- Typical underground mining electrical systems
- Types of mining equipment found in underground mines
- Different types and amounts of electrical voltage
- Some of the dangers encountered while working around electricity
- Effects of electricity on the human body
 1. Electrical shock
 2. Electrical burns
 3. Electrical arcs
- Basic explanation of electricity
- Basic components of an electrical circuit
- How adverse conditions can affect electrical components and equipment
 1. Wet conditions
 2. Poor lighting
 3. Low height
 4. Poor roof conditions
- Requirements of direct current and alternating current equipment installations
 1. General installation requirements
 2. Typical panel circuitry
 3. Responsibilities of a certified electrician
 4. Lock and tag out procedures
- Specific maintenance

procedures and examinations

1. Items a certified electrician should be alert for, such as: Permissibility examinations, reacting to problems, troubleshooting and testing.

- General inspection procedures and examinations

1. Items a general miner should be alert for such as:

- Frayed or damaged cables
- Malfunctioning controls
- Damaged equipment

The video cassette, "Underground Mining Electrical Safety," is available from MSHA.

For information on obtaining this video, please contact Mary Lord at the National Mine Health and Safety Academy at (304) 256-3257 or lord-mary@msha.gov.



APRIL



Wellness

Monitoring Cardiovascular Exercise Intensity

What level of intensity is right for you? The ability to monitor and adjust exercise intensity is essential to the safety, effectiveness, and enjoyment of aerobic exercise. “High” levels of intensity may contribute to injury, fatigue, and exercise burn-out. “Low” levels will produce little or no cardiovascular effect. Monitoring intensity also helps exercisers document their increasing levels of fitness, which serves as an incentive to keep working out.

For safe and effective cardiovascular workouts, many fitness experts recommend exercising at an intensity equal to 60-80 percent of your maximum heart rate. Although heart rate can provide a helpful guide, people are different, so general rules don’t always apply. Several other

limitations exist:

- ❖ Fitness gains depend to some extent on current levels of fitness. If you are unfit, you will begin to achieve cardiovascular benefits at intensity levels below 60 percent. If you are in great shape, you may need to work at higher intensity levels to show improvement.

- ❖ Some people—including hypertensives, cardiac patients, diabetics, and pregnant women—do not have a “normal” heart rate response to exercise.

- ❖ Antihistamines, cold medications, antidepressants, and tranquilizers have an effect on the heart rate that might make monitoring inaccurate.

- ❖ Caffeine and nicotine affect heart rates in ways that can influence this type of monitoring technique.

For these reasons, it is recommended that you use a simple “talk test” or “exertion awareness check” to ensure that you maintain a moderate level of intensity during your workout.

Talk Test

You should be able to breathe comfortably, deeply, and rhythmically during aerobic exercise—even be able to carry on a conversation. If you are gasping or short of breath, or if you can’t talk or answer a question, you probably should reduce

your exercise intensity.

Exertion Awareness Check

During exercise, use any simple method to evaluate on a “gut level” how hard you are working. A numerical scale might be as follows:

- | | |
|----|--------------|
| 0 | Nothing |
| 1 | Very light |
| 3 | Light |
| 5 | Moderate |
| 7 | Heavy |
| 9 | Very heavy |
| 10 | Near maximum |

Recreational Sports Instead of Aerobic Exercise?

Many miners choose to spend most, if not all, of their “physical conditioning” time playing recreational sports, such as basketball, tennis, or volleyball. These members often experience high injury rates associated with playing sports. Conversely, some miners perform only aerobic exercise (like jogging) while neglecting to do stretching or strength training. Again, injuries are common.

This is no coincidence. Recreational athletes are often injured simply because they are out of shape. When someone is not in condition and tries to play a strenuous game, they get injured. Playing sports with weak muscles, tight muscles, or an unfit

cardiovascular system leads to injury. If someone is also carrying extra weight (the more you weigh, the more impact there is with each step), injuries are practically guaranteed.

Another prime reason for injury is games that are played too aggressively. For whatever reason, many people use recreational sports as an opportunity to demonstrate their athletic prowess, trying to impress their friends...and end up hurting themselves or others needlessly. Too often, in sports at any level, excessive aggression is used to make up for lack of skill.

Physical training is very specific—it only works if you do it correctly:

- ❖ To increase or maintain muscular flexibility, you must perform static stretching exercises... without them, muscles gradually become tighter.

- ❖ To increase or maintain muscular fitness, you need to perform strength training exercises... otherwise, strength is progressively lost as time goes by.

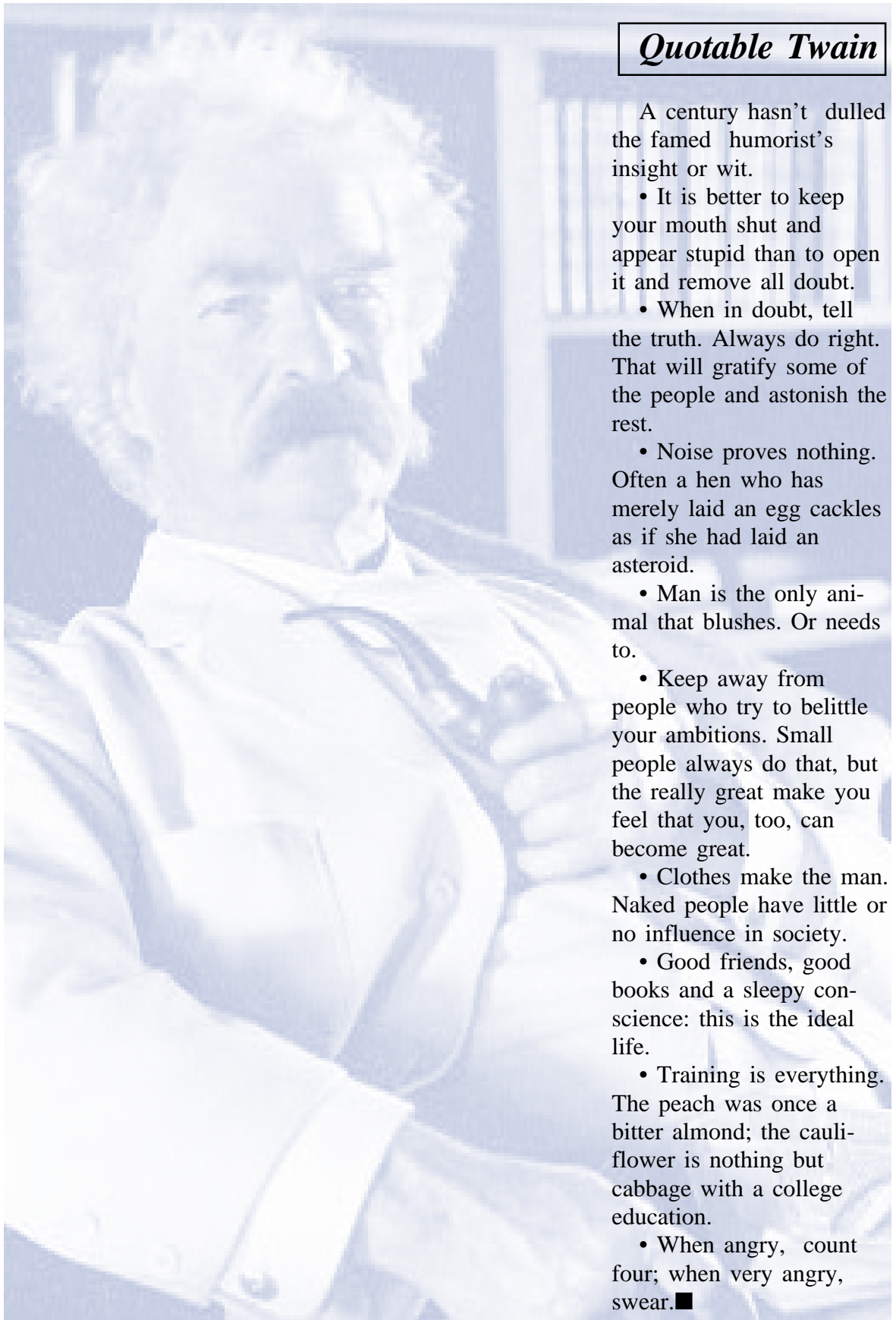
- ❖ To increase or maintain cardiovascular fitness, regular aerobic exercise is necessary...otherwise, your cardiovascular system gets more and more “out of shape.”

Basketball, tennis, and volleyball are games

designed more for fun and competition than for fitness. During these games, no static stretching is going on, and there certainly isn't any strength training involved either. Sports also fall short of aerobic exercise for improving the cardiovascular system because intensity levels are not steadily maintained throughout the game. Your heart rate falls as soon as the ball goes out of bounds, or is passed to another player, or whenever time outs occur, etc.

In short, playing sports is not effective training—it typically has little positive effect on your physical conditioning, and your chances of getting injured are higher. Therefore, sports should not be used to get in shape—you should be in shape before you play sports. Playing sports is not a very efficient method for staying in shape either. That's why stretching, strength conditioning, and aerobic exercise are all known as “training.” The only thing that playing a sport can do is make you better at that particular game, plus burn up a few calories in the process.○





Quotable Twain

A century hasn't dulled the famed humorist's insight or wit.

- It is better to keep your mouth shut and appear stupid than to open it and remove all doubt.

- When in doubt, tell the truth. Always do right. That will gratify some of the people and astonish the rest.

- Noise proves nothing. Often a hen who has merely laid an egg cackles as if she had laid an asteroid.

- Man is the only animal that blushes. Or needs to.

- Keep away from people who try to belittle your ambitions. Small people always do that, but the really great make you feel that you, too, can become great.

- Clothes make the man. Naked people have little or no influence in society.

- Good friends, good books and a sleepy conscience: this is the ideal life.

- Training is everything. The peach was once a bitter almond; the cauliflower is nothing but cabbage with a college education.

- When angry, count four; when very angry, swear. ■

Mining History



*Idaho Sunshine Mine Memorial
Location: Northern Idaho, Exit 54 off I-90 near Kellogg, Idaho*

The statue stands at the mouth of the Big Creek Canyon in the hills of Northern Idaho. The metal-sculpted hard rock miner eternally beams his cap lamp toward the site of one of America’s worst mining disasters. On a late Spring day in 1972 at the Sunshine Mine, ninety-one miners were killed by a large underground fire.

The statue is the creation of Ken Lonn of

Auburn, Washington. Mr. Lonn is a former miner and shift boss at the Sunshine mine. He worked at the “Shine” after the fire and sculpted the statue in the plant at the mine site. He is currently retired from mining and is a self-employed sculptor and painter.

A poem written by Phil Batt, former state senator and recently retired governor of Idaho, is on the

base of the statue along with the names of the ninety-one miners killed in the disaster. The statue is 12 1/2 feet tall.

A miner’s day ceremony is held on the second day of May each year to honor the men who died at the Sunshine Mine. The statue is visible from I-90.

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HOLMES SAFETY ASSOCIATION

APRIL

NIOSH/MSHA
National Mine Health and Safety Academy

Mine Fire Control Seminar



A 1-day Mine Fire Control Seminar, conducted jointly by the National Institute for Occupational Safety and Health (NIOSH), Pittsburgh Research Laboratory and the National Mine Health and Safety Academy, will be held on June 14. This seminar is designed to enhance your awareness of the dangers of underground mine fires. The presentations will focus on detecting, controlling, responding to, and extinguishing mine fires.

This seminar is for miners; safety, training, and ventilation personnel; mine rescue and fire brigade members; supervisors; and representatives from labor unions, academia, and Federal, State, and local government agencies.

For technical information on the workshop, please contact Ron Conti, NIOSH, Pittsburgh Research Laboratory at 412-386-4918, by fax at 412-386-4919, or e-mail at rkc4@cdc.gov, or Dave Friley, National Mine Health and Safety Academy at 304-256-3343.



JUNE 14, 2001

2001 Holmes Safety Association, MSIA, NASMIA National Meetings

The 2001 National Meetings of the Holmes Safety Association, Mine Safety Institute of America, and National Association of State Mine Inspection Agencies will be held together in San Antonio, Texas during June 4-7, 2001. This meeting will provide a variety of Safety and Health workshops presented by experts from around the U.S., and representing all sectors of mining.

The Meeting will be held at the Holiday Inn San Antonio Riverwalk in downtown San Antonio. Call 210-224-2500 to make reservations. Rooms are limited and registration should be made by April 30th. Be sure to indicate you are attending the Holmes Safety Association meeting to get the reduced room rate of \$91.00. The registration fee is \$150.00 for early registration on or before April 30th. Late registration is \$175.00 after April 30th. Registration for spouses and guests is \$100.00 and covers all special events except the golf outing.

BUSINESS MEETINGS

- NASMIA (June 4th 8:30 - 4:00)
- MSIA Board of Dir.
(June 5th 1:00 - 3:00)
- Annual Meeting**
(June 6th 4:00 - 5:00)
- JAH/HSA Exec. Comm.
(June 5th 3:00 - 5:00)
- Annual Meeting**
(June 7th 4:00 - 5:00)

AGENDA

REGISTRATION (June 4-7)

WORKSHOPS

- Innovative Annual Refresher
- Abandoned Mines and Employee Safety
- Blasting Dynamics
- HAZCOM
- EFS Makes the Difference
- Lock Out / Tag Out
- Noise Abatement
- Tailgate Safety
- Low Tech Solutions
- Independent Contractor's Responsibility Towards Safety
- Dust Control Processes
- Fall Protection

PANEL SESSIONS

- Noise Standard
- Part 46

SPECIAL EVENTS

- Golf Outing (June 5th)
- Vendors Reception *
- Evening Fiesta Recep *
- HSA Awards Banquet *
- * Cash Bar

For more info. contact:

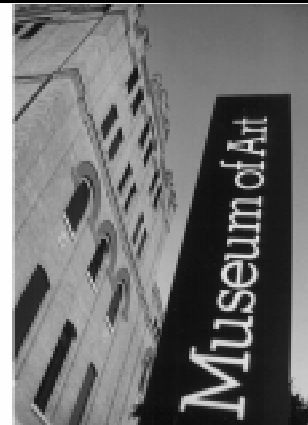
Judy Tate or Sherry Wood
at 214-767-8423 or 8401

Bone



San Antonio

Rendon



Willson



Stafford

(See next page)

APRIL

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HOLMES SAFETY ASSOCIATION

The 2001 National Holmes Safety Association Meeting

June 5, 6 and 7
San Antonio, Texas

Complete this form, detach and mail with check or money order made out to **HOLMES SAFETY ASSOCIATION** to the following address:

Judy Tate
HSA Planning Committee Chair MSHA
1100 Commerce St., Rm 4C50
Dallas, TX 75242

NAME _____

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Attendees: _____ @\$150.00 = _____

Spouses/ _____ @\$100.00 = _____

Guests:

Total:

Will you and/or your guest be participating in the Golf Outing: YES____
NO____

If yes, more information will be sent to you.



Join Today! and Grow with us...

Apply for Membership...

Membership is free. Your organization can become a **Holmes Safety Association Chapter** by completing a membership application and submitting it to the Holmes Safety Association.

Contact Person: _____ Phone No. _____

Company Name: _____

Street/P.O. Box: _____ City: _____

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Name you would like to call the chapter being established:

Name and organization of person assisting in recruiting this application:

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Send to: Holmes Safety Association
P.O. Box 4187
Falls Church, VA 22044-0187
or
Telephone: (703) 235-8264
Fax: (703) 235-9412

APRIL

New Membership or Address Changes?

For address changes and new subscription requests, contact:

Bob Rhea

Holmes Safety Association Bulletin Mailing List

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Fax: 703/235-9412

e-mail: rhea-robert@msha.gov

Please address any comments to:

Donald Starr

Holmes Safety Association Bulletin

MSHA-US DOL

National Mine Health and Safety Academy

1301 Airport Road

Beaver, WV 25813-9426

Please call us at 304/256-3283 or

Fax us at 304/256-3524

e-mail: starr-donald@msha.gov

NOTICE: We welcome any materials that you submit to the Holmes Safety Association Bulletin. For more information visit the MSHA Home Page at www.msha.gov. If you have any color and black/white photographs that you feel are suitable for use on the front cover of the Bulletin, please submit them to the editor. We cannot guarantee that they will be published, but if they are, we will list the contributor(s). Please let us know what you would like to see more of, or less of, in the ***Bulletin***.



Reminder: The District Council Safety Competition for 2001 is underway - please remember that if you are participating this year, you need to mail your quarterly report to:

**Mine Safety & Health Administration
Educational Policy and Development
Holmes Safety Association Bulletin
P.O. Box 4187
Falls Church, Virginia 22044-0187**



Holmes Safety Association Officers and Executive Committee 1999-2001

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