TRANSCRIPT OF PROCEEDINGS

In the Matter of:	)
	)
PUBLIC MEETING	)
	)
REQUEST FOR INFORMATION:	)
SAFETY IMPROVEMENT	)
TECHNOLOGIES FOR MOBILE	)
EQUIPMENT AT SURFACE MINES,	)
AND FOR BELT CONVEYORS AT	)
SURFACE AND UNDERGROUND	)
MINES	)

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(202) 628-4888

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MINE SAFETY AND HEALTH ADMINISTRATION

In the Matter of:	)
	)
PUBLIC MEETING	)
	)
REQUEST FOR INFORMATION: SAFETY IMPROVEMENT TECHNOLOGIES FOR MOBILE EQUIPMENT AT SURFACE MINES, AND FOR BELT CONVEYORS AT SURFACE AND UNDERGROUND MINES	)
BEFORE:	KEVIN STRICKLIN, Chair WILLIAM FRANCART, Member TIMOTHY WATKINS, Member
MEETING:	Tuesday, September 25, 2018
LOCATION:	Room 7W202 Mine Safety and Health Administration (HQ) 201 Twelfth Street South Arlington, Virginia 22202
PARTICIPANTS:	Todd Bosik Stephen Lee Hunter Prillaman Steve Davis Stephen Robuck

I N D E X

P R O C E E D I N G S

(9:00 a.m.)

MR. STRICKLIN: Shirley, this is Kevin Stricklin, and we're ready to go live if you are ready to turn that on for us.

OPERATOR: Sounds great. At this point, I'm going to place your lines on listen-only. In the meantime, friends, you'll hear some music. Your line is live at that time, but I'll go ahead and remove the music and introduce you. It'll be just one second.

MR. STRICKLIN: Thank you very much.

OPERATOR: You're welcome.

(Pause.)

OPERATOR: Welcome, and thank you for standing by. Your lines have been placed on the listen-only mode until the question-and-answer session. At that time, if you would like to ask a question, you may press star-1. Today's conference is being recorded. If you have any objections, you may disconnect at this time. And now I'll turn the call to Mr. Kevin Stricklin, Administrator for Coal Mine Safety and Health. You may begin, sir.

MR. STRICKLIN: Thank you. Good morning. As Shirley mentioned, my name is Kevin Stricklin. I'm the Administrator for Coal Mine Safety and Health.

I'm also the Acting Administrator for Metal and Nonmetal. I want to welcome all of you here today. As you can see, I'm going to read this opening statement to all of you. And then we'll open it up.

Thank you for your attendance and participation. I will be the moderator of this public meeting to gather information about safety improvement technologies for mobile equipment at surface mines, and for belt conveyors at surface and underground mines.

On behalf of Assistant Secretary of Labor for Mine Safety and Health, David Zatezalo, I want to welcome all of you here. I wouldn't be surprised if David stops up sometime before the end of our meeting as well, to say hello to all of you. He's aware of this going on today. And if his scheduled permitted, he said he would stop up.

Let me introduce the other members of the panel here. To my left is Tim Watkins. Tim is the Deputy Administrator for Coal Mine Safety and Health, and to my right is Bill Francart. Bill is the Director of Technical Support.

On June 26th of this year, MSHA published a Request for Information seeking data and information on technologies, engineering controls, and best

practices that could reduce accidents involving mobile equipment, which includes power haulage equipment and belt conveyors. MSHA is considering these technologies, engineering controls, and best practices that could: 1) increase the use of seatbelts; 2) enhance an equipment operator's ability to see all areas near the machine and warn the operator of potential collision hazards; 3) prevent equipment operators from driving over a high wall or a dump point; and 4) prevent entanglement hazards related to working near moving or reenergized belt conveyors.

On July 25th of this year, we announced in the *Federal Register* six public meetings and a webinar. This is the sixth and final meeting soliciting additional comment, data, and information on technologies that can reduce accidents involving mobile equipment at surface mines and belt conveyors at surface and underground mines.

Mobile equipment: Mobile equipment used in surface coal and metal and nonmetal mines and surface areas of underground mines is a broad category of equipment that includes bulldozers, front end loaders, service trucks, skid steers, haul trucks, and many other types of vehicles and equipment.

Accidents involving mobile equipment have

historically accounted for a large number of fatalities in mining, especially in the metal and nonmetal sector. Since 2007, 61 miners have been killed in these types of accidents. MSHA naturally has conducted an investigation of all these accidents and determined that the contributing factors included: no seatbelts or seatbelts not being used; larger vehicles striking smaller vehicles; and equipment operators' difficulty in detecting the edge of high walls or dump points, causing equipment to fall from substantial height.

Seatbelts: MSHA examined 38 fatal accidents that occurred since 2007 that involved mobile equipment in which the victim was not wearing a seatbelt. MSHA determined that 35 of these 38 accidents -- or 92 percent -- might have survived had they been wearing a seatbelt. MSHA is seeking data and information on engineering controls and best practices, such as those that affect equipment operation in the event the operator does not fasten his seatbelt.

MSHA is also interested in engineering controls, such as audible and digital warning devices and best practices that encourage and promote seatbelt use without directly preventing or affecting equipment

operation.

Large Equipment Striking Smaller Equipment:

And the next topic will be large equipment striking smaller equipment. Surface mining vehicles can be several stories tall and have limited line of sight. Since 2003, there have been 23 fatalities caused by a larger vehicle striking a smaller vehicle. In 2017 alone, there were 4 fatalities. There was a fatality at a surface gold mine in Nevada last year that could have easily been 9 fatalities instead of 2. There was a safety director that was taking 8 new employees on a tour of the mine, got close to a big piece of equipment, and that big piece of equipment actually ran over a van.

And I guess I can say fortunately to the 7 people who lived, but unfortunately to the 2 that didn't, it could have very easily been all 9 people in that van that were killed because of that larger piece of equipment that didn't notice and see the smaller piece and ran the front of that van over.

MSHA has found that blind areas around large mobile equipment in which equipment operators cannot see miners, equipment, or structures, contributed to these striking accidents. On our web site -- and it's a presentation Dave gives when he goes around the

country -- there is a picture of a big piece of equipment with a lot of little things in front of it. It shows you what the line of sight is and what that big equipment operator actually sees versus what he doesn't see. And it's pretty overwhelming when you look at this picture, the things that are there --and if I were driving that big piece of equipment, I would not be able to see.

So, we're seeking information and data on engineering controls such as collision warning systems, collision avoidance system, and best practices that could provide equipment operators better information about their surroundings and help reduce accidents.

Again, I don't want to keep talking about what Dave Zatezalo would say if he was here, but if he was, he would say it's pretty tough for me to go buy a new car today and not put the car in reverse and have a TV screen on the dash or a screen on the dash show me what is behind me. And for a little more money, when you put your turn signal on to get into the passing lane, you have a view of what is next to you. And his question will be: when I'm buying these million dollar pieces of surface haulage equipment that are so huge, why wouldn't I just spend $10,000

more or less than $10,000 to get that same technology in this multi-million dollar piece of surface equipment as I do in a $20,000 car? It's a good question.

And Bill here has had meetings with a number of operators. His folks in Tech Support has them. And I think Dave is going to be talking to him here in the next month or so to just ask them the same question. You know, how hard is it when you manufacture these big pieces of equipment to put that type of technology on?

So, that's something we're interested in gathering information about. And naturally, our whole goal in this is to protect miners so they're not seriously injured or killed in these types of accidents.

High Wall and Dump Points: Since 2007, there has been 20 fatal accidents in surface coal and metal and nonmetal mines involving bulldozer operators and haul truck drivers who traveled over the edge of a high wall or dump point. We're dealing with a couple of fatals this year in metal and nonmetal for that specific reason. Where vehicles have just driven straight over a high wall or into an impoundment. And, you know, again there’s technology available to

give a warning through the GPS system -- I'll give you an example. I played golf a couple of weeks ago. I was in a golf cart. And I'm trying to get as close to the green as I can in this golf cart, and the GPS shuts me off from getting to it. I can't get as close as I want to get.

Why can't we use that same technology? We can do it in a golf cart. Why can't we do it in big haulage equipment to make sure that these trucks don't get as close to the high wall and possibly or go over the highwall? So, we know technology is there. Can we get manufacturers and operators to convince themselves that this will be good technology for us to put on haul trucks around dumping points?

MSHA also seeks data and information on other devices that provide visual, audible, or other signals, and best practices that warn equipment operators of hazards in their locations.

Belt Conveyors: Since 2007 -- this is belt conveyors now. Since 2007, there have been 17 fatalities related to working near or around belt conveyors of which 76 percent were related to miners becoming entangled in belt drives, belt rollers, and discharge points.

MSHA has found that factors that contributed

to entanglement hazards include inadequate or missing guards, inadequate or insufficient number of crossovers in strategic locations, and inappropriate lock out/tag out procedures. Coal had 5 fatalities last year, I believe, and metal has 1 that just occurred in the Northeast District -- in Pennsylvania -- not too long ago of miners becoming entangled in a belt.

MSHA is interested in data and information on systems that can sense a miner's presence in hazardous locations, ensure that machine guards are properly secured in place, or ensure machines are properly locked out and tagged out during maintenance.

Training and Technical Assistance: MSHA is also seeking information from stakeholders on best practices, training materials, policies and procedures that may improve safety in and around mobile equipment and working near belt conveyors. MSHA seeks information on how training can increase seatbelt use and improve equipment operators' awareness of hazards at the mine site.

MSHA also seeks suggestions on how training can ensure that miners lock and tag conveyor belts before performing maintenance work.

This meeting will be conducted in an

informal manner. The panel may ask questions of a speaker. And you in the audience can ask questions of us three as panel members. We'll ultimately make available a verbatim transcript of this public hearing -- public meeting approximately two weeks from now on our web site. You can view the transcript of this public meeting as well as the other public meetings and comments on our website at msha.gov and on regulations.gov.

You may also submit additional comments using one of the methods identified in the Addresses Section of the Request for Information. That's from our web site. If providing comments, please provide the specific information and supporting rationale for your position.

MSHA also requests data and information on the cost, benefits, and technological and economic feasibility of the engineering controls. Also, MSHA wants to hear from you on suggestions or examples of best practices for keeping miners safe around powered haulage equipment.

All comments must be received by Monday, December 24th. You can also view all the other comments that people have given to us on regulations.gov or the agency's website, www.msha.gov,

and select the link for regulations. You can also comment on the comments that are on our website that people have submitted. So, I encourage anybody who is thinking about submitting some to look that over, see if there is something of interest to you, and use that as well as your own comments to give us your thoughts on it.

Tim, do you have anything you'd like to add?

MR. WATKINS: No. I'm good.

MR. STRICKLIN: Bill, is there anything you would like to add?

MR. FRANCART: Not at this point.

MR. STRICKLIN: If you have a copy of your testimony or presentation, please give a copy to the court reporter so it can be appended to meeting transcripts. When you -- if you are making a part of the presentation, I ask you to come to the front and speak clearly into the microphone, giving your name, please spell your name, and -- before you give your presentation.

With that, I'd like to ask Todd Bosik to come up to the front and give a presentation.

MR. BOSIK: Good morning, everybody. My name is Todd Bosik. I'm the Director of Sales for Schroth Safety Products. A bit of a background on

Schroth. We're a seatbelt company in aviation, military, and racing sectors for -- since seatbelts were invented. Today we're here to -- we've actually attended many of the stakeholder meetings -- in fact, we've attended all of the stakeholder meetings -- to present our new capability on taking best-in-breed automotive seatbelt technology and use it -- and really point it to enhance some of the requirements you guys have outlined in your request.

So, as we've heard and as stated, statistically there are a lot of injuries and fatalities that are related to vehicle usage in mines. A lot of the problems stem from, you know, either the seatbelt is not being worn or the seatbelt is, perhaps, too loose for the occupants. So, what we're here to do is to demonstrate -- and I have a small video of what this product looks like. We're here to demonstrate what we could do as a potential augmentation of an existing vehicle.

(Pause.)

(Asides.)

IT GUY: The sound is not getting pushed out. I apologize.

MR. BOSIK: So, looking -- while the video loads up. We've got the requirements that were stated

in your request. One of the challenges is --

(Video plays.)

MR. BOSIK: Sorry. We just have no video.

(Video plays.)

MR. STRICKLIN: Let's go off the record for just a second.

(Off the record.)

MR. STRICKLIN: Ready? Back on the record.

(Video plays.)

MR. BOSIK: So, that gives you a bit of an overview of what the capabilities are. Again, this is a little bit of the statistics behind, you know, why we're here. Obviously, injuries happen. Injuries happen in a number of different vehicle types. It's not just limited to one specific vehicle type. So, it's important for us, from a development perspective, to have a product that can be used across the fleet.

Taking our lead from the MSHA requirements, adding something that's a high-visibility seatbelt material was important. So, switching a black and putting high-vis red or orange was something that we developed. Having the ability to integrate that with some sort of warning light or audible warning to ensure that the occupant is reminded to wear the seatbelt. Or perhaps even provide some sort of

visible warning on top of the vehicle that says, "hey, the occupant is driving down the road, or with or without the seatbelt connected."

You know, ultimately, having the right seatbelt will allow the other safety enhancements that are built into these vehicles, the rollover protection systems, to work better. Obviously, nothing is foolproof. But ensuring the occupant wears the seatbelt correctly, ensuring that it's comfortable, and then ensuring that it prevents flailing is a large portion of enhancing the safety.

One of the things -- we've worked with -- one mine, Peabody Industries -- I'm sorry, Peabody -- over the last few years, we've done a quick implementation on some of their vehicles. We did it with a couple of trucks. In fact, where the 3 trucks that we developed this system for and that was back in 2016. They actually won a NIOSH safety award with this product and this implementation as an innovative safety enhancement.

So, what, you know, the conclusions were -- and these were sort of taken from the end-user group. During a rollover event, a driver can be tossed -- I'm just reading from the slide now, of course -- violently in a cab, even with their restraints from

their traditional black belt. And this can still lead to injury.

So, obviously, having a three-point belt similar to what you have in your current automobile is an advantage from a safety perspective. Although, you know, admittedly it's a pain and nobody wants to wear it. So, making it more comfortable, more user-friendly, is also helpful. And these are some testimonials from Peabody. "We've had employees injured for not being properly secured to their seat during a rollover or other type of event. Many of our machines still have two-point belts, which allow an employee to be tossed around the cab during these type of events." And, "equipment operators have little or no warning that an event may occur."

So, obviously -- and what you saw in the video was that we've done a number of things. And the next slide will talk a little bit about what we've done to sort of align ourselves a little bit with some of the thrust.

So, starting off, we're taking a motorized seatbelt. And that's a differentiator. There are other technologies out there that use an explosive driving system and they're designed to be a one-time use system to take the slack out of the seat -- which

answers one of the concerns, right? Having flailing injuries is a concern. So, removing that slack is achievable.

In our case, what we've done is we've converted our seat into high-visibility safety orange. We have an interlock in our seatbelt that every time that seatbelt is clicked in, we have a data-logging capability. So, that can be tied into the vehicle data log to review operator usage. It could be used to, you know, send a signal to turn on a light on top of the vehicle that says, that vehicle -- you know, the occupant is driving, the operator is driving, with the seatbelt engaged. Or it could be the opposite. We could tie it actually into the vehicle to make sure that the vehicle doesn't move unless the seatbelt is clicked in.

So, that's, you know, one of the small things that we've done with this. The reality is, with the enhancements and sensor technology, all of that stuff could be data-linked, could be sent out to a central control area where you could monitor health monitoring, seatbelt usage of all of the occupants throughout -- all of the users throughout your complex.

The other thing that we've done is we've

provided this haptic response. So -- and it's configurable. As the vehicle starts to approach critical rollover positions, we provide that little tugging on the seatbelt that reminds the occupant you're getting to that hairy, dangerous point. And that's configurable. Obviously, different vehicles will have different rollover points. And we do that in both front, back, and left-right. And I guess we, sort of, finally then -- in the event of an actual rollover, one of the things you want to do is make sure that the occupant is completely snugged up into the seat. And so, we take all the slack out of the seat and do a hard pull, as we call it.

From an integration perspective, we're working closely with a few seat vendors who currently have our system installed. So, what we're doing is we're proposing to have a built-in solution to provide fleet owners the opportunity to either swap them out through attrition -- you replace the seat every couple of years anyway. Why not put in a seat with these enhancements? You know, or, you know, heck, go ahead and replace them all. I'm okay with that, as I say with a smile.

Bottom line is, in summary, it's ready for use now. This is not a science fair project. It's an

off-the-shelf capability that we have today. It was awarded a NIOSH award. Our facilities are located here in Pompano Beach, Florida. We also have some capabilities over in Germany. So, we can support this from a worldwide perspective.

To summarize, the Peabody efforts right now, we're looking at some initial development and installation phase with them. They're our early adopters. And for any of you who have colleagues there, you know, we can help reach out to them as well.

And as an aside, in the week of October 8th through 10th, we will be here in Washington, D.C. attending the annual AUSA exposition. So, if anybody wants to come see that technology, we'll actually have it on display. And that's all I have to say.

Any questions? Yes, sir.

MR. ROBUK: I did want to ask --

MR. STRICKLIN: Steve, could you please give your name and --

MR. ROBUK: Sorry about that.

MR. STRICKLIN: -- for the court reporter.

MR. ROBUK: Steve Robuk from Portland Cement Association. I did want to ask, have you looked at interlocking the starting of the vehicle to the

clicking of the seatbelt?

MR. BOSIK: Yes. So, certainly, you know, we have a dry contact. So, ultimately, that capability is there. And, you know, our position is to enable the end user to decide how they want to use that interlock. You know, whether it's a training device, whether it's a, hey, we looked at your -- you know, your usage last week, and you only had it connected it for 2 out of your 18 hours. That's not acceptable. All the way up to the vehicle doesn't run unless you have it engaged.

Obviously, you know, it's a fairly simple thing at this point to engage that. But at this point, Peabody was not looking to do that. That doesn't necessarily mean that's not in the best practice. But it is certainly a capability; easily done.

Any other questions? Yes, sir.

MR. DAVIS: Steve Davis from Rio Tinto. I'm just interested to know if you've got a four-point version of this or you're looking at it?

MR. BOSIK: We indeed have a four-point. It's more of a yoke device. You know, we do five-point harnesses as well. I mean, ultimately, to try and convert people from a two-point to a three-point

is a big push. But certainly we can provide you with a four-point capability as well. Having four motors or two motors will add a little bit of cost and testing (phonetic). But it's technically very feasible and readily done.

MR. DAVIS: Okay.

MR. BOSIK: Anything else?

OPERATOR: Would you like to take questions from the phone lines?

MR. STRICKLIN: Yes, we would.

OPERATOR: Thank you. On the phone lines, if you'd like to ask a question at this time, just press star-1 and record your name clearly. Begin with star-1 if you have a question on the phone line. And one moment, please.

(Pause.)

OPERATOR: And at this time, I'm showing no questions on the phone line.

MR. STRICKLIN: Thank you. And thank you, Todd.

Is there anyone else in the room or on the phone that would wish to make a presentation this morning or discuss any subjects that were associated with our presentation today?

OPERATOR: And again, just press star-1 to

have your phone line opened.

(Pause.)

MR. STRICKLIN: Okay. There doesn't appear to be any. So, again I would like --

OPERATOR: We do have one. Sir, I apologize. We do have one. I actually have two on the phone lines that came in. I'll open up the first line. It's from Hunter Prillaman. You may ask your question, and spell your name and state your question.

MR. PRILLAMAN: Hi. This is Hunter Prillaman from National Lime Association. I just wanted to thank you for this process. The only comment that I would like to make -- it's not really a question -- is that we've been looking at this technology for a while. Our members are reviewing it and we'll certainly have full comments. But the thing to be sure of is, whatever technology is chosen, that it will work properly in the varied mine environments in metal and nonmetal, and that they'll be -- that there needs to be sufficient testing and review.

So, I think that the concept -- the concept is good, and we recognize a lot of the problems. It's just that we want to make sure that the practical application will work. And thanks for the opportunity to comment.

COURT REPORTER: I'm sorry. What was his last name?

MR. STRICKLIN: Hunter Prillaman, P-R-I-L-L-I-M-A-N.

MR. PRILLAMAN: It's A-M-A-N. Sorry about that.

MR. STRICKLIN: A-M-A-N. And, Hunter, we do appreciate you -- your comment, and naturally, that's on the record, and thank you.

MR. PRILLAMAN: Thank you.

OPERATOR: Thank you. Our next person is Stephen Lee. You may ask your question and please state your name.

MR. LEE: Hi. It's Stephen Lee. I'm with Bloomberg Environment. Thank you for convening this meeting today. I had a question about, you know, the, sort of, going forward. What is the likelihood of MSHA giving a regulation? I mean, is it -- do you have any sense at this point as to, you know, whether that is going to happen? Or is there going to be just guidance, sort of, best practices? Are you able to give any sense at this time?

MR. STRICKLIN: Everybody is holding their breath right now. But that was humor. No. We do not have any sense of that. You know, our goal right now

is request for information and gathering information -- just like the gentleman spoke of the seatbelts -- and sharing that information with the public. And I guess if we had a goal, it would be to decrease the number of fatalities that have occurred because of these three subjects. And if we can do anything to share information, to gather information that would help to reduce it, that's our goal in this.

At one of our previous meetings -- and it's on the record. His name is Mike Peelish. Mike worked for Cyprus Coal. And in 1991, we went through the same process. There was a big equipment hitting smaller equipment, killing miners. And we promoted the idea of best practices, putting in on cards, sharing it with miners. MSHA did, operators did. And that may be what comes out of this RFI.

This is not meant to intend that there is regulations forthcoming. So, the short answer, Steve -- Stephen, is no, I cannot give you any date of regulations coming. And I cannot even tell you that regulations will come.

MR. LEE: Thank you.

OPERATOR: I'm showing no further comments or questions on the phone lines.

MR. STRICKLIN: Okay. Thank you very much

on the phone. We do have a question in our audience here in person.

MR. ROBUK: This is Steve Robuk again from Portland Cement Association. I was actually going to ask virtually the same question, and that is: how do you guys see this process moving forward? What will you do with all the data? You're gathering quite a bit of information with the public meetings and gathering of comments. And so, how will you use that information?

And you've answered that. But I don't know if you've got any other comments on that.

MR. STRICKLIN: And I really don't. I mean, we have our friends from NIOSH back here with us that have sat in on this meeting. They've come to our other meetings. I would think if we can gather enough steam from this type of thing, our next thing may be to have some type of conference where we all get together again and try to come up with best practices, besides gathering this from all of you, sitting down again, and sharing best practices with everyone.

Again, our goal in this -- and I'm sure the mine operators' goal -- is to decrease the chance of a fatality through any of these things. And so, if we were ever to consider regulations, naturally that

would be something we would publicize in the *Federal Register*; get input again from people. But at this stage, that is not on the drawing board.

Any other questions or comments from anyone?

(No response.)

MR. STRICKLIN: Before I close it out, Tim, you got anything to add?

MR. WATKINS: I do not.

MR. STRICKLIN: Bill, do you have anything to add?

MR. FRANCART: No.

MR. STRICKLIN: Okay. Again, I want to thank everyone for attending this meeting. I want to emphasize that we need your comments by December 24th. We will take all of your comments and concerns into consideration.

Before this meeting concludes, I wanted to mention that Executive Order 13777, Enforcing the Regulatory Reform Agenda, directs each federal agency to evaluate existing regulations and make recommendations regarding their repeal, replacement, or modification consistent with applicable law. As part of the evaluation, E.O. 13777 requires each agency's regulatory reform task force to seek input or other assistance as permitted by law from entities

significantly affected by federal regulations.

In compliance with the executive order, on October 23, 2017, MSHA posted a regulatory reform email address on the agency's website for stakeholders to send recommendations on existing rules, regulations, and standards that could be repealed, replaced, or modified without reducing miner safety or health. MSHA again requests stakeholders review the existing comments on the repeal of regulations -- that's on our website -- and give you the opportunity to comment on them.

Please identify that comment and provide specific information, including any empirical evidence and data, to the extent possible, to support your position on whether or not you support the commenter's proposal. MSHA considers early public participation in the regulatory reform process to be particularly important. MSHA expects that stakeholder comments will initiate public dialogue and assist the agency in its review and assessment of existing requirements on how best to minimize regulatory burdens on mine operators without diminishing protection afforded miners under the Mine Act.

At this time, I want to thank all of you very much, and this concludes our stakeholder meeting.

(Whereupon, at 9:44 a.m., the meeting was adjourned.)

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REPORTER'S CERTIFICATE

CASE TITLE: Request for Information: Safety Improvement Technologies for Mobile Equipment at Surface Mines, and for Belt Conveyors at Surface and Underground Mines

MEETING DATE: September 25, 2018

LOCATION: Arlington, Virginia

I hereby certify that the proceedings and evidence are contained fully and accurately on the tapes and notes reported by me at the meeting in the above case before the United States Mine Safety and Health Administration.

Date: 10/1/18

Evelyn Sobel

Evelyn Sobel
Official Reporter
Heritage Reporting Corporation
Suite 206
1220 L Street, N.W.
Washington, D.C. 20005-4018

Safety Improvement Technologies for Mobile Equipment at Surface Mines, and for Belt Conveyors at Surface and Underground Mines

Public Stakeholders Meeting

September 25, 2018

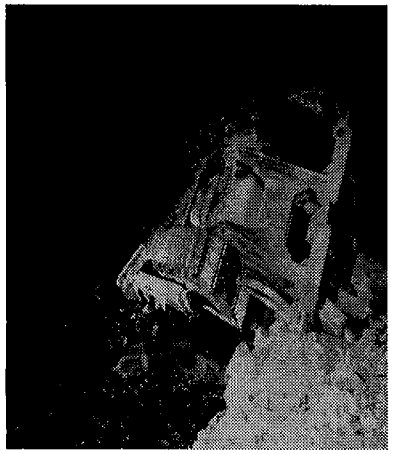
Linda Raisovich-Parsons

Deputy Administrator, UMWA Department of Occupational Health and Safety

Good morning/afternoon. My name is Linda Raisovich-Parsons and I am the Deputy Administrator for the United Mine Workers Department of Occupational Health and Safety. My testimony today will be short and to the point to offer support for MSHA's efforts to introduce new technology that may be of benefit in protecting miner's lives. The Union has long been an advocate for incorporating new technology into the workplace that may provide protection to our miners. We are anxious to hear from manufacturers and see the new technologies that are available to improve protections in the workplace. Hazards around mobile equipment and belt conveyors have long been a major source of accidents and fatalities. MSHA points out that since 2007, 61 miners have been killed in accidents involving mobile equipment. During that same period there have been 17 fatalities related to working near or around belt conveyors.

The use of new technologies could go a long way in reducing those numbers.

The use of current automobile technologies such as collision avoidance systems, collision warning systems, seat belt warning signals and engineering controls all could add a much needed improvement in preventing these type accidents. We agree that the time has come to incorporate some of these life-saving technologies into the workplace. Therefore, please accept the United Mine Workers blessings and support for this endeavor.



Motorized Seat Belt Off Road (MSB-OR)

Seat Belt Warning and Rollover Protection

SCHROTH®

Background- From MSHA

- Mining safety could be substantially improved by preventing accidents that involve mobile equipment at surface coal mines.
- Accidents involving mobile equipment have historically accounted for a large number of the fatalities in mining, especially in metal and nonmetal mines.
  - **In 2017, for example, nearly 40 % of the 28 mining fatalities > 30% of injuries involved mobile equipment.**
  - **Since 2007, 61 miners have been killed in accidents involving mobile equipment.**
- The Mine Safety and Health Administration (MSHA) is taking a number of actions related to mobile equipment to improve miners' safety.
  - **One areas includes the increased use of seatbelts.**
- MSHA has preliminarily determined that mobile equipment operators are more likely to survive rollover and tipping accidents when they are wearing a seatbelt.
- MSHA examined 38 fatal accidents that occurred since 2007 which the deceased was not wearing a seatbelt
  - **MSHA determined that 35 of the victims (92 percent) might have survived had they been wearing a seatbelt.**

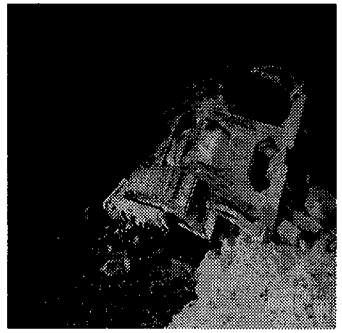
Background -From MSHA

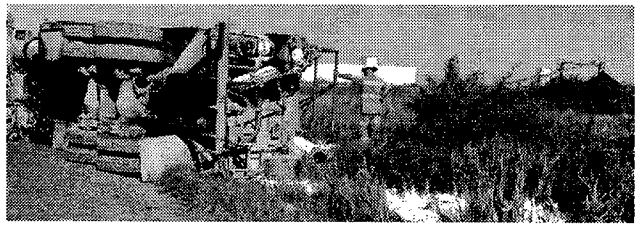
- Mobile equipment used at surface coal mines, surface metal and nonmetal mines, and the surface areas of underground mines is a broad category that includes;

  - Bulldozers, front end loaders, service trucks, skid steers, haul trucks and many other types of vehicles and equipment
- Areas of interest include;
  - High-visibility seatbelt materials
  - Warning lights and audible warning signals, that remind the equipment operator to fasten the seatbelt.
  - Additional advancements could promote seatbelt usage by making equipment operation impractical or uncomfortable, or by notifying mine management if the seatbelt is not used (or not used properly).
- MSHA determined that one of the major contributing factors in many of these accidents included:
  - **No seatbelt, seatbelt not used, or inadequate seatbelts;**

Problem Expanded – Case Study Somerville Complex

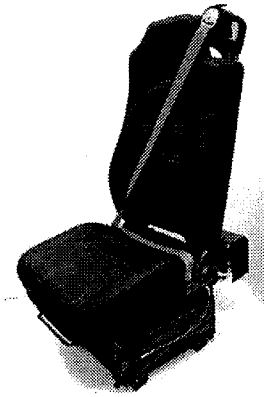
- Schroth Safety Products (SSP) has been working with one mining organization since 2016 to look at ways to improve safety with advances in seat belts design and implementation
- The Somerville Complex launched an effort to better restrain drivers in their truck seats after an April 2016 event in which a truck load shifted dramatically, causing one of their haul truck operators to experience a lower back compression fracture.
- Their internal studies came up with the following points
  - **"During sudden jolts or rollover events, a driver can be tossed violently in a cab, even while restrained with a traditional lap belt -leaving some drivers with permanent damage"**
  - Two point seat belts do not hold a persons body in place during unforeseen events.
    - **"We have had employees injured for not being properly secured to the seat during a roll-over or other type of event".**
    - **"Many of our machines still have two point seat belts which allow the employee to be tossed around the cab during these type of events".**
    - **"Equipment operators have little / no warning that the event may be occurring".**
- Trial occurred with integration into multiple vehicles and Vehicle types
  - Trucks (R190, 785 CAT, and a 777 CAT)
- Trial lead to a NIOSH Award for Mine Safety and health technology Innovations

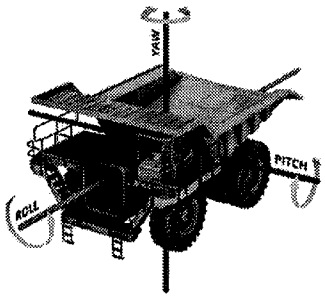




Solution- Schroth Motorized Seat belt (MSB-OR) Key Features

- Schroth Motorized Seat Belt – Off Road (MSB-OR) Kit is a seat integrated 3-point seatbelt system.
- The MSB-OR is custom engineered for the heavy truck/mining industry.
- Seat Belt Usage Improvements
  - System is designed with **High Visibility-Safety Orange** webbing to be visible from the outside of the vehicle when worn
  - System has a datalogging capability, that can be connected to visible or audible alarms
  - Data logger can be used to track seat belt usage as a training device.
  - Seat Belt feedback could be used optionally to interlock vehicle operation
- Enhancements in Occupant Safety, MSB-OR:
  - Designed to offer a haptic pre-emptive warning for potential rollover events
  - Provides an occupant hard pull back feature to protect the user in case of a roll-over event.(removes slack in belt during a rollover)
  - Designed to keep driver/operators safer in the worst kind of crash – a rollover.
- Integration Efforts
  - System can be retrofitted to existing seats or replaced as a drop in replacement seat
  - Bulldozers, front end loaders, service trucks, skid steers, haul trucks and many other types of vehicles and equipment
  - Solution can be integrated into most seat manufacturers Bostrom Seats is currently working with Schroth as an initial partner





Schroth Motorized Seat Belt(MSB-OR)

- The Schroth Motorized Seat Belt –Off Road is Ready for implementation
- System is proven to work in the harsh Mining environment, awarded a NIOSH award in 2017.
- Schroth is a worldwide company with facilities in Pompano Beach, Florida and Arnsberg, Germany providing seat belt systems for many Ground Vehicle, Racing, Military and Aviation programs worldwide.
- Peabody is currently in the budgeting phase for implementation of the MSB for other sites
- Schroth Safety Products will have a sample MSB-OR on display at the upcoming Mining and Exploration Show

Oct 8 – 10 in Washington DC.

Guests can pre-register or register on site.

Here is the registration link- **http://ausameetings.org/2018annualmeeting/registration-information/**

Questions?

For More Information

Todd Bosik
Office (954) 784-3178
Mobile (613) 203-2476
Email: todd.bosik@us.schroth.com