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Collaborating on Track Safety

MODERATOR:

Derron Heldt, Director of Racing, Prairie Meadows Racetrack and Casino

SPEAKERS:

Raymond "Butch" Lehr, President, Lehr Consulting Services, Inc.

George McDermott, Equine Turf Specialist, Tex-Sand Equestrian Services

Roy C. Smith, Track Superintendent, Parx"

Ms. Wendy Davis: Thank you all for staying — for staying for the very last panel session. It's gonna be well worth it I'm sure. Get everybody back in the room here and I know that some folks will probably dribble in here a little bit later.

First of all just a little bit of housekeeping. Again you know that we can't do this without our sponsors and our sponsor for this panel session is the American Quarter Horse Association.

We have a reception following this panel session just outside in the foyer and that's sponsored by the *Daily Racing Form*. Also we just had a refreshments break thanks to Equibase and Track Master.

Again thank those folks for making this a reality for us.

Well look it, you guys were just saying these guys just don't look so scary. That we've got all these gaps in the front. If anybody wants to come up, now's the time to do it. I promise they don't bite, nor will they throw sticks or stones at you —

Mr. Derron Heldt: Just dirt.

Ms. Wendy Davis: Just dirt, and it doesn't hurt that much. Very few race tracks have rocks.

[Laughter]

They don't have those things.

If you want to, come on forward a little bit .

At this point I would like to introduce Derron Heldt. He's the director of racing at Prairie Meadows and he's gonna moderate this panel session. I know we're gonna have a lot of great that was information talked about during the track superintendent's field day.

What they've done is taken that information, put it together in a package that's gonna be useable to those of us who are the lay people here.

Derron, thank you for agreeing to moderate this session and thank you to all of our panelists.

Mr. Derron Heldt: Thank you very much.

Ms. Wendy Davis: It's great to see you guys again.

[Laughter]

Mr. Derron Heldt: All right, Wendy. Thank you very much. I just wanna warn everybody that this panel is going to be very casual conversation up here amongst ourselves.

I encourage you if you have any questions at any time, please step up to the microphones. Identify yourself and tell us where you're from and the panelists will answer any of those questions.

This is going to be very fluid and so fluid that we have a gentleman that's going to be out in the audience at the end of this panel that's gonna talk a little bit about racing surface also. That we're gonna include him on the panel too.

With that being said I just wanna say that racing surface safety is one of if not the most important component in racing. Horse owners, trainers, racing office and betters want to see their horses compete more often than not.

That's why every summer at a different race track in the United States or Canada a Track Superintendent conference is held.

At these conferences a wide variety of topics are talked about. Today we have three panelists here.

These individuals have 100 years of track superintendent experience amongst the three of them.

They're gonna visit with you about where the profession has evolved. They're gonna talk about merging old practices and new technologies in providing a better, safe and consistent racing surface for everyone.

Let me introduce our panel. To my right here is George McDermott. George is equine surface specialist for Tex-Sand Equestrian Service. George got his start at Louisiana Downs as equipment operator in 1975.

He was named assistant track superintendent at Louisiana Downs in 1980 and he was named track superintendent at Louisiana Downs in 1991.

Then George moved onto Lone Star Track in Lone Star and Grand Prairie, Texas and he was named the track superintendent there in 2005 till his recent retirement in 2012.

Next we have Roy Smith, Roy is the current track superintendent in Parx in Pennsylvania.

To Roy's right we have Raymond "Butch" Lehr. Butch is the President of Lehr Consulting Services, Incorporated. He was employed at Churchill Downs for more than 45 years and is the track man there for over 30 years until his recent retirement.

We're gonna start off with George. George is gonna show you a couple videos on track maintenance and how to maintain a dirt and turf track.

Then talk to us a little bit about choosing the proper equipment for a race track operation.

George?

Mr. George McDermott: I have two videos. One on turf and one on dirt and it's a general roughly shot by me and put together to kinda show the procedures that you do on dirt or on the turf.

The main reason I use this film is because it shows the variety of equipment that's needed and the manpower needed to do almost normal things to a race track. These shots I'll walk you through 'em and not have you listen to the funky music that's on there because it's boring. I don't like it anyway. I'll just kinda talk you through and show you what's going on. They're not very long. They're about five minutes each one on the main track and one on the turf.

I'll talk you through it and show you what it is.

Then you'll see that the need for track superintendents or people in the business to learn at this track superintendent field day that we have.

All this stuff that we learn or we see is passed down to the next generation of track people which is very important because you know how hard it is to get track men.

Okay, if you can role the video? This is in 2006 at Lone Star Park, we decided to strip the turf course at Lone Star Park to make it better, get rid of the thatch and everything else.

This machine right here is actually stripping one inch of the grass and dirt off of the turf track. This is in August. Its 100 degrees when they're doing this. These poor guys were just burning up, but that's what you gotta do sometimes.

What we do is we get small trailers. You pull 'em next to this machine and it actually disperses it into the trailer. You have to do this on the whole racing surface.

This process sometimes causes the turf to die or to be damaged. You have to make plans to either reseed or resod areas. Luckily when this is over just at the end you'll see the result, what we ended up with by race time.

This is verti-cutting. This is another process that you go in there and this actually cleans any debris or anything off the turf track. These are kinda mix matched a little bit. This deep tining, this is where you poke holes in it or aerate the turf track.

Now this process should be done at least twice a year but it's depending on your budgets and if you're allowed to have this stuff come in and whether you wanna do it another way.

As you can see all the holes punched in it, now what we're gonna is we'll be applying almost 900 tons of top dressing sand that goes down into the holes and covers the surface of the turf course. That process alone took two days to do that and luckily we weren't racing during the time. It was in between our meets so we had plenty of time to do this.

You also have to have time to grow it in in the spring. We had a fall meet when we have Quarter horse racing. We had time through the winter for everything to settle in and to get ready to start it up come springtime and let it grow in by April when we start our turf racing.

I'm gonna tell you a little secret, you're seeing something that didn't last very long. We could not put down enough material to put the 900 ton down that way. We ended up actually dumping it in rows and spreading it out. The company that I work with they do that and they did a very good job at it.

Right now this is the turf growing in some and you can see as it's greening up. Now this is after it's been cut. The way you saw it out of there. It was aerated and also the slices you see in there they're actually doing slits in it. The slits go down about six, eight inches.

Now this is deep tinning in February. We're getting ready to start up for the year and here again he's aerating the turf course again. You can see it's still dormant at this time.

This is the time when all track guys are going, "God I hope it gets hot real quick." That Bermuda grass won't grow until you get above 63 degrees at night.

Here comes the first race all grown in after it was stripped out by an inch. We didn't have to put any sod down. We didn't end up putting any seeds down. It all grew back.

Okay, we've all seen turf races before. We can go onto the next one now. The next one will be on the dirt. It's a opening up renovation. It's gonna take a minute to put this up.

When you're preparing a turf track or a main track, a dirt track, the standard dirt tracks after it's been laid down for a while or is dormant or we call it putting it to bed. When there's not gonna be any activity or training.

You have to get that track back together again when the horses get ready to go. It's a battle when you get your employees back to when you start, to when the weather changes. It's all a fight and this is in the southern region.

The guys up north like Butch and Roy have to deal with seeding and different kinds of grasses and Roy runs all the time. He's always racing. I don't think you've ever stopped racing, have you?

Mr. Raymond Lehr: It's been awhile.

Mr. George McDermott: It's been awhile. Now it's snowing there and he's not a happy camper.

[Laughter]

It takes a lot of equipment and as you see the equipment that's being used you gotta remember you have to train all these people. I love when people say, "Well you can just get a farmer out there, he can do that." I said, "Well okay put that farmer on that \$160,000 tractor pulling a \$25,000 hairer. Have him go around and take down the inside rail before the first race on opening day and pay him \$10 an hour." They just don't pay attention.

This is actually the opening up or putting more material on a race track because you have to add materials to a race track to make it stay in the way it works the best in that region at that race track with the material that you can get.

These pictures are kinda in and out of order but the grader that you see right there has actually what they call ripped and tilled, well I call it deep cutting. I don't like the term ripping and tilling.

The grader has gone over the whole racing surface, cut down in six to eight inches. Now these big tillers come out and they till that ground again and now we come back. Here's a float on a tractor. Now he's going over it after the man tills it. It packs it enough so we can put the next piece of equipment on it, that would be a roller hair which we now only use when we have to prep the track.

We don't use it all the time during racing. We found the safety was — we had a better safety record without using roller hairs than when we used them. Better than 30 percent better.

This is another truck that comes in spreading dirt and sand on the race track. That's how deep we were cutting in, it was four and three-quarters to five inches after we started working it. Now we'll tighten the track up even more than that once we really start working it.

You have to remember most race tracks or mile race tracks got probably 9,000 tons?

Mr. Roy C. Smith: At least.

Mr. George McDermott: At least 9,000 tons. While we're doing this. This is a great shot. They ask if it would be okay if they shot some video for a company that wanted to promote themselves.

In the middle of spreading all this dirt and all this work and all these tractors and everything out there. I had to wait for these people to run down and get filmed. I couldn't believe it. You can't wait till tomorrow?

Mr. Derron Heldt: Was Michael Dickenson in there?

Mr. George McDermott: Huh?

Mr. Derron Heldt: Was Michael Dickenson in there?

Mr. George McDermott: Oh no not in that one. Not in that one. As you can tell the race track is dry right there because that's the best way to cut it in. We cut it in like that and then we'll eventually start wetting it and everything else we have to do with it.

As you can see near the end of this film it'll show some of the equipment. You've already seen roller hairs, tillers, motor graders, you'll see the other equipment shortly that all has to be used at some time, somewhere on the track.

You never know when you're gonna need a piece of equipment, when you can use it, when you can't use it. That's one of the learning tools that these new guys coming up are learning at this track superintendent field day that we have.

There is a right time and a wrong time to use equipment. There's a right time and a wrong time to do anything to a racing surface.

Because if you don't do it in the proper time or the right way you can literally lose a race day and nobody wants to see a whole building full of people told they have to go home for the day and all that money that they have in their pockets is going with 'em.

This is the final grade we put on the race track. I graded the track after it was done 'cause it's gonna move around a little bit. Instead of having high dollar pieces of equipment we've used the plumbers pitch levels in some of these motor graders with great success because for \$27 I can pretty much stay plus or minus an eighth of an inch on a race track in the surface. The laser can stay within millimeters, all the new ones they have. They're really nice but the problem is they're about \$120,000 for a laser GPS grader.

Then you gotta put the equipment on it and the equipment's different. Then you have to have it mapped. I can answer questions on that later because the company I'm in that's what they do too. We'll actually go out there and map your base or the race track itself.

Put it in a computer and then if you rent your equipment to go out there it'll duplicate whatever you had out there.

Now here's your water trucks, your roller hairs, you saw the floats there. You'll see there's some regular cutting hairs. A lot of these are made by different companies.

Some race tracks make their own equipment which is good, but there is companies out there that make equipment. There's many of 'em.

There's one of the big tillers which are expensive and hard to get. When you're working with a mile race track and two chutes and you're cutting it all up and putting it together.

You wanna try to start in the morning and finish that evening. If it rains on you when you got it like that, you're gonna lose it.

Water trucks with pony motors. That's all to pump your — those are 3,000 gallon water trucks. We used to use three of them 'em at Lone Star Park. We would put down 9,000 gallons every race in the middle of summer.

There's a hydraulically operated one. We did away with the diesel motor on one. Tried out a hydraulic system, it worked very good. Some of the drivers like it, some of 'em don't.

For \$15,000 for a motor and only \$8,00 for hydraulics we went to the other one. There's a deep cutting hair, what they term in California ripping hair. There's a gang roller. All this equipment can be used at almost any time on the dirt track. This will be just the shot after we — opening day first race. There it is.

You move that amount of material around with the right group of people and you'll get good quality racing and a safe race track.

The main thing is safety, safety, safety.

My favorite quote that's used by a lot of people is, "But there is a lot riding on what we do." Those riders are sitting on top of an animal we're protecting to make sure he gets his best run on the ground because if that horse goes down he can hurt a person.

That's a track superintendent's goal, safety first. It doesn't matter what it is, safety's got to be first.

Okay.

Mr. Derron Heldt: Thank you, George. Thank you, George. Next we're gonna visit a little bit with Roy Smith.

Roy was very instrumental in starting the track superintendent's conference a few years back. Roy's gonna give us a little history on the track superintendent's conference.

Mr. Roy C. Smith: I've been attending the meetings out here for 30 years. I remember meeting in the Double Tree downtown in along with Butch and a few other people in this room.

Going back to the Stan Bernstein award today rung a bell because Stan was very instrumental in the tracks superintendent's meeting at University of Arizona.

Because he had the first track superintendent's meeting at Meadow Lands in 1981.

I attended the second one at Gulf Stream Park in '82. After that we didn't have them anymore. We started coming out here.

We would come every year and we'd be part of the panel. We'd get 40, 50 track superintendents from around the country to come out here in December. It got to be watered down and got to be less and less.

The last time I was here was in 2001. Looked around at the room and a gentleman from Prairie Meadows, Bob Gorla, who was here with me and we sat looking at one another and said, "Well what are we gonna do?"

[Laughter]

Went home that winter and in the middle of the winter it was 2:00 in the morning and a light bulb went off as it was snowing.

I said, "There's no reason I can't have a track superintendents meeting here at Philadelphia Park."

I called Rick Frye and John Hubbs and bounced it off of them. We planned to have a superintendent's meeting in June. We were just gonna invite a few tracks from the Mid-Atlantic Region.

The more it got out the more people came and we ended up with 24 track superintendents. It was a one-day meeting, that's all it was.

We had all my business people that I do business with. They brought their equipment, we showed equipment, we kicked dirt, kicked the equipment and just had a great time. My company was very supportive of it.

At the end of the day we said to one another well what are we gonna do next year. We appointed Javier from Arlington Park. We went to Arlington Park the next year.

It just grew from there and we just had our last track superintendent's meeting at Del Mar in August and we go to a different race track hosted every year. We had 120 people attend it. It was fantastic.

Now we're up to two and a half days and we have jockeys' speak. We had three Hall of Fame jockey's speak to us this year and people said — I started having jockeys speak at the panel in Philadelphia Park with the tenth anniversary.

They said you're gonna have jockey's speak to track superintendents?

I said, "Well I have a very good rapport with my jockeys and I respect 'em and they're all part of the game. You've gotta get their opinion. I would ask their opinion of the race track before I'd ask a trainer."

We had the jockeys up there and it was such a great meeting to bounce things off the jockeys and it went around the room and we had three Hall of Famers this year on the jockey panel at Del Mar and it was fantastic.

We also had a couple of Hall of Fame trainers up on the panel and it's all about communication.

We're all trying to get to the same end point and we just try and bring all these different tools together whether it be mechanical or conversational or anything to help us do our job better and exchange this information around the country for one day, two days, whatever it may be and exchange the ideas.

We all do the same thing.

We all want to get to the same end product, but we all do it a little differently.

There isn't a meeting that I don't leave from that I haven't learned something. It's all about exchanging tools and making a better product and a safer environment for the horses or the jockeys or everybody involved.

We're going to Tampa in August of '14 and every year it's gonna be a different environment and we get the host race track to set the dates. Just try and bring everybody together.

Stan Bernstein was very instrumental in our meetings back in '81 and '82. He was one of the key players that got all them track people together. It's just carrying on that tradition and exchanging ideas and bringing people together to all share ideas.

Mr. Derron Heldt: All right, Roy you had mentioned seeking advice from jockeys and trainers.

Do you ever sit down with the practice and vets on the backside and get their opinion of what's taking place or what they're seeing when horses come back from races?

Mr. Roy C. Smith: It's tough to pin 'em down because they're working for their clients. It's like two fence lines. You're driving through the barn areas or something if you see one you might stop and talk to 'em about a certain incident or something.

It's kinda tough to pin those guys down. You mainly deal with the state veterinarians more so than the practicing vets.

Mr. Derron Heldt: Now at either one of you guys race tracks do you guys have safety committee meetings where you sit down with the jockeys, the trainers and people from management and yourself and talk about what takes place during the week or biweekly?

Mr. Roy C. Smith: Yeah, we do. We do. You gotta be careful which trainers or which jockeys you talk to, because it tends to go back to personal agendas and you gotta be careful of that.

Yes, they're safety meetings, yes, because we do talk about safety. They're not weekly meetings.

Mr. George McDermott: They can be. I've found they can be. The problem is and I know Butch consults and I go to different race tracks. What I found is when you get a group of people together you have to get opinions from everybody.

Usually that meeting that they call on a regular basis some people won't say anything in that meeting. Sometimes you gotta go hunt for a good answer and sometimes the state vets are the best way to go.

I'm sure Roy and Butch over the years have got somebody they can get an ear next to. That person usually is always pretty good about it. He doesn't have an agenda, he doesn't have anything to worry about.

He might just be an exercise rider, but he's gonna tell you what he thinks.

All that information counts but a lot of times these meetings, the translation between the track man and everyone else it's like I say sometimes the track man's speaking English and the horse men are speaking French and they can't communicate.

When I got to a place the first thing I do is I tell them listen I'm going to try to find out why you guys aren't getting the result that you want. Whether it be the track man or the horsemen.

A lot of times it goes away on its own because they don't talk to each other enough or get the good information.

Mr. Derron Heldt: Okay, thank you. Next we're going to visit a little bit with Butch. Butch is gonna visit on the NTRA safety alliance.

Mr. Raymond Lehr: Yes, you know I'm just listening. I think the video that George had showed a lot of the basic things that we do and all of us do a little something different.

To this day I've been in this a good while and in fact I'm retired. I'm still involved in a little project at Indiana Downs right now.

The one thing I found early on, I remember these seminars that we have and all the track guys getting together. The very first one I went to was the first one in the Meadow Lands.

Just to associate yourself with these guys I found out — I was young then. I found out these guys got the same kind of problems I do. They don't share much information because they're attacked a lot.

Myself through the years I've always tried to listen and pick up a lot of things from these guys that sit next to me and I watched Joe King. He was somebody I looked up to in the industry. He's still kicking around doing some consulting.

Well respected in the business.

These guys are up there and we're giving you ideas that we deal with every day. Then we see people out there are trying to maybe sell something or whatever.

They attack these guys and so I think it's been very beneficial to me starting out early sharing ideas.

Then we get together, we talk about 'em and to this day there's not a book we can open up and say this is the way we should build a race track. I don't guess anybody's ever gonna agree.

I've said this publicly, I think the only way that's ever gonna happen is if we can figure out a way to put a roof over the whole place and have the temperature the same.

Weather plays a big part in what we do.

Now we're up with the synthetic tracks they have the same problems. There's not two of them alike I don't think.

I just wanna point out a turning point in my career was like I say starting off, sharing ideas. I think that's great and I really thought the panel this year with the jockeys it was really good. I mean we had some guys that know their business. Those are the guys that feel everything on a horse with that race track.

Saying that I was working at Churchill, everybody knows about Eight Bells. That was probably the turning point where we needed to share ideas.

We needed to chart what we do. I hear it all the time, well that's not the same track you had yesterday or that track is different derby week.

We have such good horses running on a day like a Breeders' Cup, the best from around the world.

Tracks if you're doing your job and everything's perfect they're gonna be running near record time. It's not because we want it that way, but that's just some of the reasoning for it.

I've been working — after this tragedy with Mick Peterson, I don't know how many people know of Mick. He is the guy with the science.

It gives us something to work with, to chart what we do. Like I said there's no book out there that'll tell us this is the way you should do things. Not yet, but I think maybe that'll come.

We're all really just working our hearts out trying to make sure we get it the best we can for these horses and the riders.

I thought we would maybe talk a little bit about Mick's part in this and sharing information.

A lot of people aren't involved in it that would help in maybe charting some of these things that we need to have better information on.

Mr. Derron Heldt: What you're saying, Butch, right now you guys kinda operate by feel, touch and what you hear with the horses galloping around the track or working in the morning?

Mr. Raymond Lehr: Well it's mostly experience, what works for us and what works for me might not work for Roy, might not work for George. Because there's a reason for all that, it's weather.

Mr. George McDermott: Yeah, but you gotta admit in our career since we're so old now. In our careers the change of — it's hard to get that idea out of a lot of people's head.

They always say well it's just dirt isn't it?

Now from the time we all started in this business and Roy's been at it a real long time, he's older than everybody.

[Laughter]

We've found that the science started playing a real good role in this to get closer and closer to get the right blend of material to put on a race track.

A lot of people think you just go in a pit and grab dirt and throw it on the race track. Well that's the furthest thing from the truth.

There's hardly anybody in the industry that doesn't understand the chemical makeup of their race track.

You can ask almost any track guy, you say, "Well how much clay you got on the track?" "Well I'm running around 14 now but I'd rather have it at 13, so I'm gonna kinda dilute it with a little —"

The conversation goes for 30 minutes and then when you're done as a track guy you understand what he's talking about and everything.

This guy just bled his heart out and told you everything you needed to know about his race track. Okay, good.

That's where these new guys coming up don't have that.

There's nobody teaching them except for guys that are mentoring them or bringing them up through the ranks. Because you can teach the wrong way or you can teach the right way.

Like Butch, Joe King's been around forever. New York racing, who knows racing better than Joe King?

All these people have mentored us. I think Joe King's involved with almost any race track guy knows of Joe King and knows he can do a good job.

Same with Mick Peterson and his operation, the new soil labs that he has going and the way that they're dealing with the ground that the horse goes across.

It's very important and it's not just dirt.

Mr. Raymond Lehr: Yeah, that's what I was trying to get at. It's a sharing of ideas and getting with people that has the same problems you do and we all get opinions.

I mean I can't tell ya how many people wanna give me advice.

At some point you put your blinkers on and you try to make the best decision you can with what you've got with all the changes in racing and budgets.

What works for one race track, you might have a lot bigger budget than this smaller race track. That's where we're kinda at right now.

It's very important what we do. Then the problems that I see is well it's just a race track. Like you said just dirt, well that's not it.

It should be about the horse and the riders. That's my opinion about what we're doing.

Mr. Derron Heldt: Okay, well at this time we'll bring in Mick Peterson. Mick is the executive Director of the Racing Surface Testing Laboratory and the Libra Foundation, Professor for the College of Engineering at the University of Maine.

Mick's gonna talk a little bit about some of the cutting edge technology that's becoming available to track superintendents.

Dr. Mick Peterson: Okay, thanks a lot. First I wanna reiterate the fact that you look at what Roy's done for the industry as far as pulling together these superintendents meetings.

He's been really a key element in this communication.

I also am heavily dependent on what Butch has done because some of the superintendents there's always an assumption that the superintendents are gonna resist change or not be open.

That couldn't be further from the truth.

This is a group of people who are the most open minded. You give 'em new information. They integrate it with what they're using and adjust it.

Then pretty soon it's part of regular practice. It's a decision making process.

The other thing is though that George also showed you the complexity of this. It's interesting that he showed the ripping and tilling because I could let Butch tell us. Butch, what would happen if they ripped and tilled your track?

Mr. Raymond Lehr: If we had to.

[Laughter]

Dr. Mick Peterson: If you run a trench across Butch Lehr's track which is a real episode on Butch's track, if you run a trench across it the big risk is life and limb at that point. It has nothing to do with that's a regular practice. These are dramatically different maintenance practices in different parts of the country.

What we're seeing is that nobody and I'm not talking about the group that's up here, that there's a lot of experience.

I'm talking about the people they trained, trained them or the people who trained them. Even if you go back three generations they weren't stupid. Their goal was to get the horses back safe, keep the fields large and adapt to whatever weather they had.

The goal we've had is to capture some of that information. Because the other thing that you might notice is this group up here isn't particularly young as they pointed out themselves.

Mr. Raymond Lehr: Hey, hey.

Dr. Mick Peterson: Hey, hey, well with the exception of Butch.

[Laughter]

Really when we talk about risks to the industry, one of the biggest risk is this expertise. When Roy pulls together these people to communicate and to communicate with the younger superintendents that's an incredibly important strategic part of the industry.

Just getting this communication going. It's got risks associated with it.

Because you start moving somebody from one part of the country where tracks are maintained dramatically different than another part of the country, different weather.

We need to understand that because there isn't a big enough pool of superintendents out there to serve every track we need.

Where I've been working with and the racing surfaces testing laboratory came out of the Welfare and Safety Summit.

It's a nonprofit organization, there's nothing being sold. I can assure you we don't even stay in the black every year.

I'm always going back to the Jockey Club; help me hang on another year. The goal on this is to understand why it's different.

Why are we doing something different at Lone Star than Churchill.

The real question is should Louisiana look more like Lone Star or should it look more like Churchill and why doesn't it? This is really where the next stage of this is. I've been talking about the efforts that are going on in Korea here.

South Korea has you think okay it's not a very large country. They've got dramatically different climates within the country. They've got the same sort of issues. They've put in place for the entire country a tracking system to begin to do what you call Six Sigma. Six Sigma is monitoring the changes.

The guest for the Racing Surfaces Testing Laboratory for the superintendents meeting this year that we supported was not a soil scientist, was not a jockey, was not a civil engineer. It was a Boeing engineer.

Why? Because every morning these guys are getting up and building a new product that has the safety and health of the horses and riders. They have to rebuild it every day. They don't know what they're gonna have.

Aqueduct yesterday morning I can tell ya based on our logging they were out at 1:30 with the salt trucks and the floats.

They were building it from scratch looking forward to training in the morning. Think about that from the context of Boeing, do you get up every morning and build a brand new plane that you're gonna take off?

What these folks are doing is they're getting up in the morning. They're building a track from scratch and then they're gonna put a lot of valuable horses, riders out there in the morning to train on it. That's what we've gotta capture. That's the next stage.

Mr. Roy C. Smith: I think when you look at the three of us it goes back to geographical areas of the country. All three of us maintain different types of race track.

Dr. Mick Peterson: That's right and of course what Roy's got a perfect case there. He has to go through the winter and the differences between maintaining a dirt track in the summer in Philadelphia and the winter in Philadelphia, it's a different animal.

Mr. Roy C. Smith: It's a challenge.

[Laughter]

Mick Peterson: Butch can tell you. One of the hardest summers since I've been working with him was the tail end of a summer where it was actually drier I think you said in — you went six weeks where it was drier in Louisville than it was in Tucson. Isn't that what we came up with?

Mr. Raymond Lehr: Several places.

Dr. Mick Peterson: Yeah, and that's tough because if you can handle the rain during Derby which is kind of important to Churchill Downs to be able to handle the rain during Derby week.

[Laughter]

It's gonna be really tough to handle six weeks in August where you don't have a trace of rain.

Mr. Derron Heldt: Mick, did you have some other information about what NYRA's doing with tracking?

Dr. Mick Peterson: Yeah, so what's been interesting as we've progressed through this process is originally I started working with the southern California race tracks because there was a lot of interest in kinda moving the bar ahead.

After Eight Bells Churchill downs put together the safety from start to finish initiative. Butch and I got to be really close. I got to be really close with the Churchill tracks.

Then after Aqueduct last year that's been the most recent stage of this. Feel free to stop by and I'll show you everything we're doing. Where we're at right now with the New York tracks is every piece of equipment that goes out on the track has GPS tracking equipment on it. We know the speed, we know the path, we know what it's being used for.

At the same time the maintenance personnel are using tablet computers to enter the data so that you know how much water they put on, how much salt they put on. What equipment was attached to it.

We marry this with weather data that's taken every 15 minutes from each of the tracks.

The Racing Surfaces Testing Laboratory is now in partnership with the Jockey Club.

We have access to the full equine injury database.

As an academic when I first got involved in this the question was is it a good track? Well define a good track.

Well a good track is a track where the horses come back safe, the riders come back safe.

We use the equine injury database and the chart collar data for the career ending did not finish because that begins to capture some of the soft tissue injuries.

By combining that data we're then beginning to use the data from the New York Racing Association to begin to predict what maintenance protocols we can use to make the track as safe as possible.

We're now to the point where Keeneland also has a similar system in place and San Anita is putting that in.

The goal here is to begin to develop this maintenance documentation.

Again just like that aircraft checklist when you're sitting there on the tarmac waiting for them and there's the guy who comes in with the notebook and they say, "We can't leave until we get the safety checklist."

We don't do that in racing yet and that's where we need to go.

Now NYRA is sort of the Gold Plan, you know if you were down on Silver Card there's no reason we can't be entering that manually on the tracks that don't have the budget for online GPS tracking of all their equipment.

Because this is the documentation. This is the replacement for the little books that have existed since the 1950's where they were in somebody's pocket.

They had the documentation. Of course the issue with the little booklet is as soon as somebody — well what you are is you're one failed stance away from losing that knowledge. The idea is to continue to keep this knowledge and to share it further. It can't be prescriptive.

If I went in and ripped and tilled Churchill Downs I can tell you that would be a good way to cancel racing for a good long time.

If I didn't rip and till Lone Star I might have just about as bad a problem as if I did rip and till.

We gotta understand and that's how we bring this information together.

I suspect some of the other people up there on the panel I know have some other experience on some of these other tracks. I don't want to dominate all the time.

Mr. George McDermott: I got sent up to Ohio last year. They needed to train a track crew up there. It was kind of funny they were really hurting for somebody to go up there and I just didn't wanna go, didn't wanna go. I said it's up north. I told Roy, I said, "Roy, I don't know man going back up north in the cold, ahh." They finally really needed somebody to go up there because they had a brand new crew. Everyone was brand new.

They said they were gonna send this guy from Texas up there. There was a couple naysayers, "Why are we getting a guy from Texas to come up here in Ohio." The saving grace is I was born in New Jersey so I said, "Well I was born in New Jersey." Everything was fine then.

We went up there and we started the basics all over again like Mick says you start all over with a group of guys and say,

"Okay first thing we're gonna do, we're gonna check everything."

"What do you mean check everything?"

I said, "I want all the tires checked. I want all the equipment checked. I want everything checked."

Once these guys went through all that we made a few adjustments and within a week. The track's great and it was cold. I don't like it up there. I don't like it up there.

It came out good.

The crew got trained.

I made a new track man out of the guy that was in the seat there.

Within a month they were on the road and everything was going fine. That's what this track superintendent thing is about we're mentoring all the next generation.

I don't think they'll remember me like Joe King.

[Laughter]

At least I passed some knowledge down to somebody because there's no school that teaches this.

Nobody teaches this to any track guys and that's why we're in such a dilemma now where there is hardly any people that wanna do the job.

Who wants to get up in the morning with Roy Smith and follow him around for 24 hours, I sure don't.

Mr. Roy C. Smith: Seven days a week.

Mr. George McDermott: Seven days a week racing all the time. How many days a year do you not race?

Mr. Roy C. Smith: We race 205.

Mr. George McDermott: See that's not bad. There's 365 days a year.

Mr. Roy C. Smith: When you say it like that it isn't bad. It's four days a week year round.

Mr. George McDermott: Yeah.

Mr. Roy C. Smith: That's when it doesn't sound good.

Mr. George McDermott: Yeah, if he's not racing he's training 'em. He's got horses on the ground this whole time. He's gotta work with that race track. Adjust it and do whatever he's gonna do to it.

All the different weather and I know for a fact after I went to Ohio especially. Your weather can change so quick on you and if you don't know the right procedures to do something to a track. You can fail.

The failing is not having a safe track but also not having people come in that door and bet money because that's what it's all about.

Let's face it track maintenance we're a loss to the company really. We're just like plumbing, but we're also like the tires on a truck. You can go down the highway on them rims, you're not gonna get very far.

That's where this training of information to each other and to learn from each other is so beneficial and maybe now we're creating some new track superintendents out there. I know we have.

That's because of Butch and Roy started these ideas to get us all together to do that. No one's more grateful than the new guys in the business that call us from time to time. Because that network of track men they don't hide what they know.

I know Roy gets calls from people all over the country. I do. I know Butch does and it's not like oh I don't have time to talk to you. You get back with 'em.

Even if they're having a bad day. You're having a bad day, so what?

Buck up. You know what to do. Go do it and then the next day they go, "I'm sorry I didn't mean to call you." I said, "Did you get it done?" He goes, "Yeah." Good that's all it was about.

Mr. Derron Heldt: All right, I think we have a question here.

Mr. Greg Hosch: From Horseman's Park in Omaha, Nebraska.

I think it was Roy that alluded to the makeup of the cushion. It could of been George, one of the two.

The mix of the clay and the sand and the whole works. I know that it's tough to maintain because the cushion is different at every track.

I mean if you look at Tampa it's almost like pure sand.

My question is what about the base? What is the base at Parx or what it is at Churchill or down at Lone Star, Louisiana Downs, is it a lime stone bottom or is it clay base or are the bases out there consistent or are they all different?

Mr. George McDermott: You start Butch.

Mr. Raymond Lehr: Well I think the base is the most important part of the race track.

Churchill Downs was an older race track built many years ago, 39 years ago. It has a clay base, but the clay base is down so far that really the horses never get there and like Mick said we don't wanna touch it.

We've done the ground penetrating radar, I think that's what it's called.

Surprisingly it was in pretty good shape so we never did do anything with the base because of the time of year we run.

When you get into freezing temperatures most of the racetracks are limestone base, and there's nothing wrong with either/or. A lot of 'em if you got underground moisture problems, things like that you wanna be with the limestone and not a clay base.

Really the most important part of the race track is the foundation and it's stable. I guess that's what I'm getting at.

Right now I don't know which ones the best.

Mr. George McDermott: If it holds the dirt up and holds the horses up it's good.

Mr. Raymond Lehr: Like I said the main thing in our situation we never — there is some tracks that the horses run almost practically on the base at times when it's real wet.

My opinion that's not a good thing. I think a good base as long as the horses aren't touching it, that's okay.

Mr. George McDermott: That's really one of the main differences between the east coast and the west coast. On east coast they're running in the cooler weather and everything and the west coast they tend to have deeper race tracks.

That's the terminology ripping and tilling.

That's a California term.

Where like what Butch is saying if you're running a shorter cushion there are actually some of those race tracks like Penn National especially. They have a lime down there. If they penetrate it, they can run. It's a little bit softer lime. It's not quite that hard. It's hard but if you start to lose that race track and it does get that wet and they go through.

As long as that base underneath is level you're fine.

We just had Penn National they went and wanted to check the base.

I told everybody, I said, "I don't know why you want to check it. I don't think there's gonna be anything there." They wanted to do it. The horsemen didn't — here we go.

The horsemen wanted to do it so to make it right for them they did it and they did a great job of doing that.

Then when there was nothing wrong and I was brought up there by the horsemen. I stood there with the horsemen and I was showing them, "We could of swore there was a bad spot here."

I said, "Well I walked the whole track with you. We just came around the curve you said there was a problem. Do you see anything wrong?" "No, there's nothing there." I said,

"Okay let's finish walking around and check." "No, that's what we brought you here for. Is it the same way all the way around?" I said, "Yeah."

Well they were happy.

Then I told them now the other side of the coin is you just made them move racing material off and they have to put it back. You might have created a problem. The next time you do that you have to think about what you're gonna do. Track guys'll

do almost anything they need to as long as it doesn't affect safety. If it affects safety, man you talk about getting into a hornets nest.

Going to a track superintendent's office one day and say we're gonna have to rip this track up. We gotta change something. Just try that sometime. That's not a good sight.

Audience Member: I didn't know if those bases were climate specific if you needed you know but I think —

Mr. Roy C. Smith: Well again that's what I was getting at. Geographically around the country all the race tracks are different.

All the race tracks in the northeast part of the country and mid-Atlantic region especially if you race in the winter they're gonna be limestone bases. Our limestone base on Parx Race Track or Philadelphia Park is over three foot thick of limestone screenings. It's stronger than a house.

I mean we put a new TV screen on the infield three or four years ago and we set 150 ton crane on the main track, on the base and didn't even put a dent in it.

That's how hard it is.

I mean it's like a foundation of a house. You've gotta have a good foundation for a racetrack no matter what it is.

Any race track in the northeast that runs in the wintertime, especially, and again this goes back to Joe King, all have a limestone base.

Mr. Derron Heldt: Do they all drain pretty well then if it's a limestone base?

Mr. Roy C. Smith: Yeah, because it's all surface drainage. It all drains to the inside rail. Again going back to grading and working these tracks 24 hours a day you're grading this race track constantly every day.

You've gotta put that material back where it belongs because with an elevation of a racetrack it's moving towards the inside rail. Some days if it's a wet racetrack yeah that inside's gonna be a little deeper than it should be.

Once it dries out that next day or whenever it may be you've gotta grade that material back to where it belongs so it's distributed evenly.

Mr. Derron Heldt: Perfect. Okay, thank you.

Mr. Raymond Lehr: If I can add to that too I mean George had the key point there on bases because there's a very different definition of what the base is on the west coast and the east coast because the base is very deep on the west coast or on these tracks that are ripped and tilled and have a pad.

On the east coast, for example the NYRA tracks, the difference between the winter track and the summer track is limestone screenings versus a clay base.

The clay base will tend to retain the moisture better.

The limestone screenings will wick it out of the bottom of the surface.

Anybody who suggests that a dirt track is vertically draining, Roy said it. They're crazy it's the drainage that you're looking for is to the inside rail. When you talk about bases it's important.

There are really three different designs of the track. There's the shallow sand track which I think it was Roy who mentioned or George actually mentioned that the horses are actually quite close to the base. There's only a thin layer of sand over the base.

That is the one where it's quite critical to know that the base is consistent. It'll be either clay or limestone depending on whether you're running in the winter or the summer.

The false base which is also used in wet climates, it's not ripped and tilled on a regular basis. The horses actually run on a hard pan layer. The base doesn't matter as much because it's quite a ways down, but you don't use the ripping and tilling.

We can show that that's associated with more rainfall and a design that looks more like a west coast track of the composition.

When you go back then to the tracks that rip and till the base which is oftentimes decomposed granite is quite common. It's quite deep and then you have a surface that's ripped and tilled to — you said you did it to five inches compacted.

Mr. George McDermott: Yeah what you're doing is you're clay layer will settle on a race track so especially after its been set up set up for a while the track settles, it stratifies. It goes in different layers like a layer cake.

Well you're trying to get that clay to come back up to the top layer and mix all in thoroughly so it all has the same instead of being really sandy on top.

Dr. Mick Peterson: That's the sort of thing where even mentioning that clay is clearly a semi-arid sort of a region because you'd never put that much clay in an area that got a lot rainfall.

Mr. George McDermott: Right.

Dr. Mick Peterson: You can actually show that these designs correlate to the rainfall and the composition of the tracks correlate to the rainfall which also suggests that three or four generations of maintaining that race track.

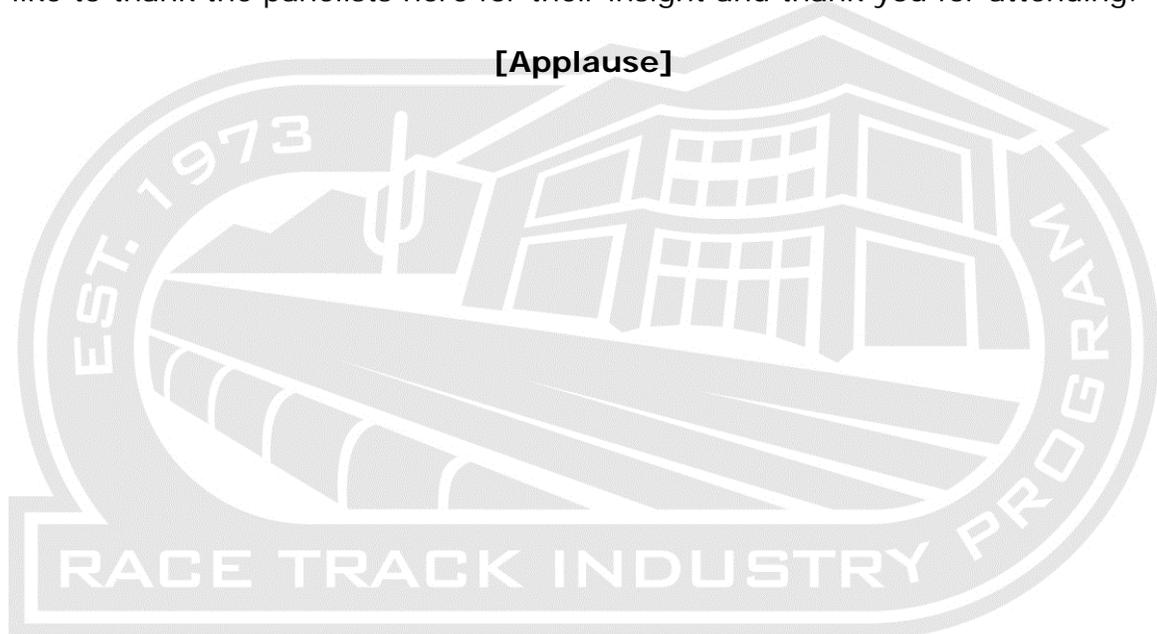
They've come up with a fair number of solutions. Really I think the most important thing we come out of this is when you have the wrong racetrack for the region, that's really when it gets really difficult to maintain.

Mr. Derron Heldt: Do we have any other questions?

I think we're getting pretty close on time.

I'd like to thank the panelists here for their insight and thank you for attending.

[Applause]



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