

Fifth Annual Joint Meeting of HTA and TRA

Monday, March 12, 2007

General Session

10:15 a.m. to 11:10 a.m.

Technical Investments in Racing: Part One

- **Don Codey, Freehold Raceway**
- **G.D. Hieronymus, Keeneland**
- **Todd Roberts, Roberts Communications Network**

Chris Scherf: Our next panel is going to discuss the technical investments in racing, and as everyone is well-aware, capital is a precious commodity in our business and the best use of it is important. We have turned into a television production through simulcasting to 87% of our audience. To most of your audience now, you are not the front gate, you are not the beautiful paddock, you are your television signal and there is a wide diversity in the quality of those signals and there has also been a sea change, I think, in the public's technical savvy, their demands for quality as everybody is moving to digital television. High definition signals are taking off like crazy and our industry is investing some into the quality of television production and display. The question is whether we are investing enough, and also the question is whether we can do this piecemeal, everybody goes their own way, or if we have to come together to make this a real priority. I guess where this topic hit home with me was Delaware Park. Last year it opened a wonderful video wall, and they brought in all new monitors and they brought in 20, maybe 25 tracks and they're all up on this huge wall and on these great monitors and you just look at these pictures and the difference is unbelievable. Some of them are crystal-clear and they look beautiful and others you sit there and go "what's wrong with that picture?" and obviously, Delaware Park on the receiving end, with the monitors, made the investment but the investment hasn't been made on the transmitting end. It can only be as good as the signal they get and we have the question of going from digital signals to analog monitors or from high definition signals to analog monitors or the other way around where you're going into the LCDs and things like that, but the signal quality is just not there to take advantage of that. So we've assembled a panel

to talk about the issues of the signal transmission, the product we actually are presenting to our simulcast players. Our first speaker promised he would bat in the leadoff spot and he's much quicker than he looks, he's always a threat to steal second, and he is the president of Pennwood and the general manager of Freehold Raceway, please welcome Don Codey.

Don Codey: Good morning. Thank you Chris, and as Dennis Dowd and I have always said, we use the word "liberate" instead of stealing second. Back in 2002 I became the general manager at Freehold and I saw a need to make changes in several areas. One of the first things we did was we changed the wagering format, added some more exotics and everything. But as Chris said, 80% of our audience is not on track anymore, so the next thing I thought that had to be changed was the way people viewed our product and I thought we needed to make it a little jazzier or sexier, whatever term you'd like to use.

Then along came Autochart who wanted to try an auto positioning system in New Jersey and they asked me what might be the best way to go about it. I have no interests in Autochart, nor does Freehold Raceway, but I directed them to one of the training centers in New Jersey where they might try it out to see how it would work. And they did so, with great acclaim from, particularly the horsemen. They went to the New Jersey Racing Commission and got permission to use it at our qualifying races at Freehold and once again, we filmed the qualifiers and the horsemen immediately fell in love with the product because, in harness racing, horsemen want to know how fast their horse went in the qualifier, did they make it, did they not, and most times they're waiting a half hour or an hour for that information by the time the judges get the sheets done and that kind of thing. So during these qualifiers, when the races were over, within seconds the time of every horse went up on the screen so naturally they fell in love with it because they knew their horse had made it, or their horse didn't make it. The next step in the process was they came looking for permission to use it for our pari-mutuel racing, and after seeing what they had done at the qualifiers and everything, watching it, seeing the reaction, our fans were able to view the qualifiers, we played them on a channel all day long during the races, it became quite evident that this was a product that certainly merited consideration. The New Jersey Racing Commission then gave permission for it to be used in pari-mutuel races. In August of 2005, we began using Autochart for our timing and our television and our graphics. Overwhelmingly, our fans, horsemen, and ourselves enjoyed the product very much. It has enabled our handicappers,

our patrons to get information in a way that had not been presented before, and as a great example, there was a race several weeks ago in which a horse was far behind the gate and in the old days it would have been a recall, and he was a good 20-25 lengths behind the field, the information went up after the race because this horse's time from the beginning of the race, with the chip being in the head number, when the information went up on the screen, I didn't happen to notice it at the time but certainly some of the horsemen did and the patrons, this horse had actually paced the fastest mile in the race by about 3/5 of a second. So that was information that our handicappers, especially the ones that are very keen, put into their memory bank and about an hour later or so, the trainer called me and he said "wow, did you see how fast my horse paced? I never would have known had it not been for that system." So it's helping our patrons with handicapping information, it's helping our horsemen as they prepare. Now one of the original ideas in looking at the system, in that it consolidated our timing, graphics, and photo-finish, while also giving us a charting system.

As of right now, that system hasn't been able to be incorporated as the official charts, but it does have that capability which eventually, down the road, to everyone here who has a racetrack, you would be able to do away with your charter at some point. Perhaps the judges would put in a break or an interference, but it would automatically give you that parked out symbols, two-wide, three-wide, during the course of the race. And when we talk about that, that's one of the things that our players certainly have enjoyed because, at the end of the race it gives you actually how much more than one mile the horse has paced or trotted during the race. And it may only be a certain number of feet, it may be a larger quantity of feet, and when you figure that into your handicapping, which our players are doing, it seems to give them the information they are looking for and as a result it creates greater handle. The system has basically operated without an awful lot of problems. As I said, the positioner is in the head number, but that is being changed so it is going to go into the saddle pad. As Murphy's Law would have it, once a month the horse's head number would fall off, and again Murphy's Law, it would always be the lead horse. So the system times the race automatically. In the event that the lead horse loses its head number and the correct timing is not apparent at first and then it is re-corrected. But it does happen, basically about once a month.

During all this process, there have been many changes made to the system as it improves. There were a couple of bumps in the beginning, mostly with head numbers, but it operates very

efficiently, the customers really enjoy it. Now they've added something that has become the big thing now, the little chicklets at the bottom. Our patrons who have not seen it yet see it, they're just going to be awed at how they're going to be able to follow a horse during a race, either in the video or with the little chicklets, see that there's three-wide. And I think that when you get to use this in a thoroughbred product with a 12-horse field on the grass, I think it's going to be a better product than it actually is on a half-mile harness track. The other question my people have asked me is, how does it operate in rain, snow, everything. There's been no effect, no matter what it is, and actually on a couple of foggy days, where you literally, even on a half-mile track, couldn't see the horses, the timing and the graphics and the horses as they were running with the order on the board, worked very, very well. The other thing is now the photo-system that comes with this happens to be digital. It is presented to judges with a much clearer picture when they go to look at the picture on the television screen, and the same with the patrons, they'll say, you know, "my horse won," or "I thought it was a dead-heat" and they'll put the photo up which very clearly delineates who the winner was and who was second or third, whatever the case may be.

Video Plays.

When I first saw that, I thought *that's going to be very, very good for novice people and groups that come in to the racetrack*, because it's something different, those little chicklets, I mean, it will make it easier for those first-time people that come as groups or novices who have only been to the races one or twice. Something new and it might get them interested in racing, and there's other products out there like that, but I think when making an investment in technology that we certainly have to spruce up our product as it appears graphically, make it a little jazzier, and I think it will help us in the long run, through attracting more people, keeping the people that we have, and I thank you very much for your time this morning.

Chris Scherf: Thank you very much Don. Just as a point of information, how many people have high definition at home? How many have bought the sets? I think that speaks to how we're getting more and more demanding in the quality of what we receive. I also think the previous presentation was awfully helpful in watching a race, and even most of the people at a racetrack are watching on television, and one of my pet gripes or thoughts that we need to do

better and I didn't know how we could do it and I think we're getting there now with the quality now that the tools will be there. But standing under a monitor at a racetrack and watching with a group of people as they hit the finish line and invariably somebody who's sitting there watching with me goes "who won the race?" Watching a race is a really difficult thing, especially if you're not a very experienced race-watcher. For a new customer, we are like ping-pong balls going around almost. It's very difficult to follow. Unfortunately last year, I had to go home for the Breeders' Cup so I didn't get to see it, but then I got to see a Breeders' Cup telecast on high definition, which I've never seen, and it's a whole different ball game. I mean, if you're talking about following horses, it's just night and day. There has been a major investment in that kind of improvement at Keeneland, and our next speaker has a long history in our industry and in the television business, and I first met him 25 years ago when he was doing the video presentation for the Eclipse Awards and I worked with him all through his career at Hammond Productions, and now in his position as the director of broadcast services and simulcasting at Keeneland and he has made a lot of changes in what they've been doing there and some very dramatic ones that were evident last year. Please welcome G.D. Hieronymus.

Don Codey: I agree, Chris, about the Breeders' Cup in HD—I was at Churchill, but I made sure that I DVR'd it so I could watch it as soon as I got home. Drives my wife nuts but I have to sit back and watch every replay and it really does a lot to enhance the game.

G.D. Hieronymus: Thanks, Don. As the director of broadcast services, I really feel like this is very important, technological investments in our game today, and we're doing a lot of great things at Keeneland and I appreciate the opportunity to talk about it. Our number one focus is the live main customer, as at most racetracks, and our research tells us that on any given race day at Keeneland, 20% of our fans are visiting for the first time, and we also attract a large number of casual and novice fans, so we have got to make that presentation to them very informative and create a destination for them to come back. To ensure that final product, they're watching more than 1,100 TVs and seven LED tote displays and it's a rare opportunity to turn that first-time casual fan into a lifelong racing fan. The last couple years, we've been taking an objective, critical look into how our customers and end-users are receiving our content. We took a complete inventory of all the televisions in various areas, and then we prioritized which ones

needed to be replaced first and it's a very methodical process. We've taken room by room and making sure that from simulcasting to the live main customer, that the back-end of that product is the best that we can make it. We've improved our displays throughout the facility and at the end of the day we're really making even an analog signal look better, I know Chris says that, we do have to improve on our production on the front end, but the LCDs and the resolution really even helps that analog signal.

Regardless of how many upgrades and additions you make there never seem to be enough screens for all the signals of course. We have 35 analog channels, two in-house digital channels, and four digital modulators that allow us to get that HD broadcast into our system. So even in our sports bar, you guys can come in and watch the NCAA tournament in HD which we feel like is a very important part. Any racetrack that has a sports bar, you want to be able to offer a wide variety of those channels. To top it off we added another channel this last fall on-track, which I will talk about in just a little bit. Delivery of our final product shouldn't be narrowly defined to just television screens. I firmly believe that large screen displays on your paddock and infields are a must. When you think about it, when was the last time you went to any sporting event and there wasn't LED technology? You're always following the game: football, NASCAR events, all over, you've really got to have that for the fans, they expect it. You'll really get a return on your investment after only a few years. A lot of other places can really help pay for these things through advertising. We don't do a lot of advertising at Keeneland on our board but it's very valuable as you can see for our race sponsors. At Keeneland we've had a new LED tote board on the drawing board for about five years, and when we embarked on our track renovation last summer, we incorporated that into the renovation. It's been a huge hit among our fans, in fact it was really the second most talked about thing besides our track services—the addition of polytrack or synthetic racing. LED is not revolutionary, it's been around for years, but what makes ours different is we really took it to a different look and put it in the hands of our TV department. A lot of times many tracks make that same investment in LEDs and they'll really turn it over to the tote company for more or less just data but you put an operator behind the system and it can really help make a creative fun thing for the fans, and you can really take a little better advantage of that display.

We elected early on to run full motion video on our display, to incorporate various camera angles to augment that traditional split screen and give the patrons very many options to

watch and follow a race. Now everyone really wants to be track-side during a race. Before we had a couple LEDs out in the paddock area and before they would really gather a lot in that paddock to watch the race. Today we found that everybody moves trackside because they want to get out trackside and it brings them closer to the race as well. I know that lots of tracks are faced with facility limitations and need upgrades, the cameras and ambiance of the facility itself, but that's just one more step in investment in technologies. You look around the country at most sporting venues, shopping malls, airports, even coffee shops; put a lot of emphasis on investing in technology. They constantly monitor their facilities, how comfortable their patrons are, employing upgrades and strategies they create an attractive, inviting environment that makes you really want to come back time and again. We're asking our fans to commit five or six hours a day to our product, we'd better be prepared to offer a comfortable, inviting environment with well thought out displays and the content is a major part of that. We made a lot of major upgrades and broadcast is part of the track renovation. One reason we're able to do that was not only because Keeneland's solid polytrack but we reconfigured the track's layout to be a more symmetrical track. So we jumped at the chance to really install conduit-accommodating things like the tracks, polytechnics and of course, Trakus. During the planning stages of the renovation project we worked closely with Trakus to make sure our needs were part of the display option as well. We thought this an important element in adding more entertainment aspect to the live racing experience.

Over the past several years, Keeneland was a test ground for Equibase, testing several types of tracking systems, GPS, and we've finally settled on RF-based technology. We first heard about Trakus in 2004 when they were doing some tests at Laurel, and followed their progress to Woodbine, and then in 2005 started talking to them seriously at the Racing Symposium about integrating Trakus into our system. At the time everybody was really looking at tracking systems as a means of gathering data, and we took a little different approach again and really thought of this as a great opportunity to bring that Trakus look to our fans on our LED boards, which we were already thinking about video-wise, camera-wise. But it really enhanced the delivery and display of a racing product, and I'll tell you our fans, even the hardcore fans, have really appreciated it. We also employed it on TVG, got midway through the meet and they got great response out of it as well, the running chicklets, and it will once again be on TVG and ESPN this next coming spring meet. Our infield board showed live video of the race, on center

display, with a vertical full-field running order, then on the left side we had the animated horses, and on the right side we had the running chicklets, and this gives patrons a lot of options to follow their horse throughout a race. Following each race we displayed feet traveled, and our hardcore fans really devoured this information, and it's all on our Website, and very, very popular. Our in-house channel devoted to Trakus, showed various replays in a number of different animated formats, including the jockey view on a winning horse who was making a late run. Our casual fans really responded to Trakus because whether or not we want to admit it, our next generation fans were all raised on video gaming technology, it's a perfect principle for them.

Last summer we invested in phase one of our broadcast center the purchase of 11 HD cameras, lenses and controls, next phase is new master control, technical ops center for TV and radio broadcast and soon through IPTV technology you'll be enjoying around the clock thoroughbred programming produced by our broadcast facility. The broadcast facility goes hand in hand with a couple other initiatives at Keeneland, one being our digital asset management project, including IT communications, our TV department working with a library to archive our sport. Plans are underway to digitally scan every issue of the Daily Racing Form and historical documents, and from our end, film and video preservation. So some day it will allow you to come in to our website or to the library and cross-reference in any number of ways. Speaking of our website, comparisons of usage from 2005 to 2006 showed that our traffic has nearly doubled. This illustrates a need for technological investments in website and we're launching a new look prior to our spring meet, it's going to be a very video-intensive site, and we've invested a lot in encoding equipment, to allow us to do multiple video streams, and this initiative gives us a better opportunity to manage the video content and products of our site. Thanks a lot for your time, and I'll look forward to any questions or comments.

Chris Scherf: Interesting that Keeneland's in the forefront of using technology now. Last track to get an announcer, that was racing the way it's meant to be, but I think Keeneland now has adopted racing the way it has to be, and obviously you're taking great advantage of that. There are a lot of questions with technology and how you use it and what it does and most racetrack managers are not expert in that, we all need expert consultants and certainly from the TRA's perspective in its 2020 committee, which is the technology committee, we have drawn heavily on

our next speaker for his expertise. He's not only extremely knowledgeable but has a real talent for putting things in terms and layman's language that even us dummies can understand. He's continuing to work with us, he's working with the committee, a subcommittee that has been formed in the 2020 committee for broadcast security, it's a major issue for example after our first meeting we pretty much figured out as an industry we have, in terms of signals, probably 100% penetration of South America, unfortunately we're closer to 0% on revenue from that penetration. Other people are getting rich off of us, so obviously security is a big issue, but for years he's been railing about the need from end to end to have basic standards and we're looking to create that and to illuminate all of us on what the issues are and where we need to go and what we need to do. Please welcome the president of Roberts Communications, Todd Roberts.

Todd Roberts: Thank you Chris. I appreciate the opportunity once again. Today I'm going to talk about two technology investments that I think need evaluation by our industry. The first is our current use of the Internet for video streaming, and second is a potential use of High Definition for the broadcast segment. As far as the Internet goes, the best thing about it that I see is that the Internet makes us and our problems related to our simulcast model look good because the Internet is now experiencing the same growing-pains that resulted in our simulcast model, growing too quickly and without a lot of long-term thought put into the process. The problem with the Internet is that theirs is a global problem, fortunately for us it's just an industry problem, but our use of video streaming is yet another example of us acting as an industry too quickly and without long term thought. Now, 20 years after simulcasting has run its course, I think we have enough sophistication to nip this one in the bud before it's too late.

The positive aspect of using the Internet for broadcasting purposes is that it's a cheap way to get content to the viewer. The negative aspect of this use is that it's a cheap way to get content to the viewer. And by that I mean: the broadcast requirements for your signal are so much stricter than the requirements for Internet streaming that it causes a lot of problems, in fact there's no licensing required to stream on the Internet, whereas on the broadcast side we all have to have FCC licenses. The cost of entry for video streaming is next to nothing compared to the broadcast segment: the bandwidth is cheaper, the equipment is cheaper, and everybody all of a sudden is a communications expert and is streaming things all over the Internet, some of them even from their bedroom, which is a lot different than in the broadcast world. This leads to the

careless handling of your content and that of course leads to piracy issues and copyright infringement issues that we're just now starting to face. So if I could make one comment or raise one question about our use of streaming, it would be this: the export simulcast model is based around the fact that the host track provides a broadcast, and only one broadcast, and it's controlled by the host and everybody in the industry who wants to use the broadcast has to go that one broadcast that's on the air. With video streaming, it's completely the opposite, there are up to five, six, or seven streams of the same broadcast all over the Internet, none of which are controlled by the host. Now, this usually means that the buyer of the signal, whether it be an account wagering company or somebody in South America or in international markets, is providing the stream. Now think about that for a minute, this is supposed to be somebody who is skilled in the reception of signals and the running of a venue to create wagering, say a simulcast or an OTB parlor, yet you've allowed them to also be in the video streaming business. What qualifications do they have? No one ever asks this question, and they just say "I want that revenue; oh you'll take care of the stream? Great, we've got a deal." And now we've got problems to deal with as a result of that. Not all video streamers do the wrong thing, but not all of them do the right thing either, and the one thing that really bothers me is that broadcast hackers are always a pain for the broadcaster, but Internet hackers are worse and you do not want to give an Internet hacker seven chances to your broadcast and misappropriate the content. You just can't do that, and yet every day when we look at the video streaming operation, we know that we are just one of six, seven or eight different people that are streaming the broadcast. So this has got to be stopped and the solution is very simple: the host has got to put his simulcast, broadcast hat on, and produce and control one video stream that anybody that wants to buy his signal and use a video stream for their operation would have to link to. And it's really simple from a technical standpoint, the users would link to the stream produced by the host track, the cost would be shared based on a usage basis of the bandwidth. This would create the lowest possible cost for anybody that wanted to use streaming because we'd get a volume buy on the bandwidth, it would eliminate all of the careless and fly-by-night operations that are in the streaming business because they wouldn't have the infrastructure to control a video stream that an entire industry was using, just like the broadcast segment, and best of all to protect the perception of your product in the marketplace. Right now, in our streaming operation, we see all the time complaints from users about the quality of the streaming but it's usually related to their

computer systems and problems on their end. Yet that perception is that the host track doesn't have enough bandwidth, has a lousy vendor providing the stream, and we can't afford to do that right now with all the content that's out there fighting for our eyeballs. The best thing about this plan is that the account wagering companies, who all use video streaming on their Websites, would still be able to use video streaming but it would be controlled by the host and they can still customize around that stream which was their intent in the first place, in my belief. So this is something I think we can correct now, and I think we have to correct it now or I guarantee you, five years from now we will be talking about the problems related to video streaming in the next 2020 meeting and we will not have learned our lesson from the mistakes we made with simulcasting 20 years ago.

So enough with the warnings, let's talk about something a little bit more positive and that's High Definition. The shame of high definition to me, as it relates to our industry, is that when I walk through the national association of broadcasters convention every year, which is held in Las Vegas in April, the number one use of content on everybody's high definition displays is horse racing, and yet we as an industry are the lowest-level user of high definition, pretty much G.D. is the only one that has anything related to high-def going on for our industry. Quick synopsis of what it takes to implement high definition: you've got to replace all the production equipment as G.D. showed, that's a host track function; you've got to replace part of the transmission equipment that companies like mine utilize, that's a host track requirement; you've got to replace all the display equipment, such as TVs, that's a guest requirement; it takes 50% more bandwidth than we currently use if we used the next standard of compression which is MPEG4-advanced video coding, and that's a host requirement. This all costs money and it requires the cooperation of the host and guest. It is, in my view, a unique problem because it's a host track driven change but the last leg of the change requires the guest to cooperate.

I have waffled on my own thoughts on whether high definition is the right answer for our industry and whether it would do anything for our industry. We all know it would cost money, the question has been, will it drive handle? I am now convinced that the change to high definition is inevitable for our industry, and the reason I feel this is as simple as the same dilemma from 20 or 30 years ago when the issue was do we go from black and white television to color? There is no question that that is going to happen with high definition, the question is rather, when is it going to happen? As I see it, the early adopters of high definition in our

industry will get an advantage as far as attracting viewers. It will be more expensive to be an early adopter, but you will get an advantage. The late adopters will have no advantage; it will be a defensive move because you don't want to be the last guy to have an OTB that doesn't have high definition. The good news is that the late adopters will enjoy the benefits of all the prices coming down. Now, with that, I'd like to tell you a story that helped convince me that this was what's going to happen for our industry. How many people, just show of hands, heard about the craziness related to Las Vegas with the NBA All-Star Game? Ok, well let me tell you, with 21 years of living in Las Vegas, I have been through every convention, every New Year's celebration, every big event that hits that town, and I have never seen, in 21 years, a more ridiculous, scarier, dangerous situation than the crowd that invaded Las Vegas for that All-Star Game weekend. Part of the problem was we had an event that was held in a 15,000 seat arena, yet 150,000 people showed up to participate with the festivities. So literally, as I walked through the Bellagio on a Thursday night, it was the most surreal scene I'd ever witnessed because I literally thought it was like the gangs of LA invading Las Vegas. I thought somebody was filming a movie, it was that surreal. The scene at the Fashion Show Mall was strange, it was strange to see that type of crowd invade Saks Fifth Avenue and Neiman Marcus, the two didn't fit. And the stories were endless, and the stories were true, most of the things you read about were true. But the unique thing was that, what the hotels tried to do to get more people be able to see the game, and I happened to read about an experiment that was going on at the Mandalay Bay related to a high definition broadcast of the game in one of their ballrooms and I thought, well that's interesting, it's a good idea. Lots of times during the rodeo, our company provides a closed-circuit broadcast to about 20 casinos that show the rodeo. The unique thing about this high def broadcast was it was going to involve high definition and 3D. Now think about that for a minute. I didn't grow up in the 3D era, but many people did that are in our industry and the combination of those two intrigued me enough that I fought through this crowd, found a way to get invited and get in to this private party to see this broadcast, and I anticipated that I would stay for five minutes, get an opinion on the technology and leave. What happened in that visit changed my viewpoint on high definition forever as it relates both to my industry, with this audience and other industries. And that is—I not only stayed more than five minutes, I stayed for an hour and a half, but I wasn't even watching the NBA All-Star Game, I was watching the skills competition held on a Saturday. Now I'm a big sports fan, but I just don't have time to

watch games, and if I'm going to watch something on TV, personally I'm going to watch a golf telecast and that's it. Even though I like basketball, I just don't watch. I would say that I was more a fan when I was 12 years old than I am now, but the broadcast I saw made me a fan. The technology that was being used intrigued me so much, the experience was so great that I said I want to sit here and watch this even though I'm watching a skills competition, which I really don't care about. And as a result of that experience, I am convinced that an early adoption of high definition for our industry, even though it doesn't involve 3D yet, could make a difference. I believe that the early adopters of high definition will attract new fans, something that we've all strived for. And if we can do that, we have a very small window right now to do it, but if we can do that I think we can get the long-term benefit. If we wait five, six, seven more years to adopt high definition, then we're going to be on the defensive end of this switch, and that won't be a bad thing, but we won't be special and we'll be just like every other sport out there. But what we can't afford to do is lose more viewers by not having some kind of early adoption of high-def. So with that, I would say that I am now firmly convinced that high definition has a place in our industry and it needs to be sooner than later. Thank you.