

# Confessions of a Former Roadie:

## *How Yesterday's Theatre People Make Today's Museum Exhibits Rock*

**A**h the good old days... Roll out of the tour bus at 7:00 am after three hours of sleep in a swaying tin can. Race into the arena ready to unload 12 trucks of lighting, audio, video and staging gear. Install the whole show in eight hours. Sound check at 5:00 pm. Mix the audio (either for the monitors or the main house system; usually my job was the monitors – this was in the days before in-the-ear monitors) throughout the course of the two-and-a-half hour show, tear it all down and load it all back into the trucks to take to the next town for another show tomorrow. All of this is accomplished working with a local tech crew whose only real motivation is what swag they get at the end of the night. (For you non-roadie types, that's T-shirts and any other trinkets the band chooses to pass out as thanks for 18 hours of hard work.)

On one particular day in June of 1990, as I approach the loading dock to begin my day in some arena in the heartland of America, I hear shouting and see people scrambling to the dock. It seems the truck driver hadn't checked the load bars on the truck. Since the loading dock was down a 30-degree incline, as he backed down the ramp to the dock the whole audio system unloaded itself on the pavement. We get the equipment loaded in and the show comes off without a flaw. This in a nutshell is what a roadie deals with on a daily basis – what I dealt with on a daily basis for some 15 years, as a former audio engineer/production manager of many live show productions and heavy metal bands touring the world's arenas and theaters. You run into many challenging technical situations that test your ability to adapt – and usually your only choice is to adapt.

I know many of you reading this are thinking, "This is another article by some former hippy longhair who doesn't have a clue about our industry, even if he can keep his drug-induced flashbacks in check. What's this story doing in a museum-based editorial section?" Well, (with the possible exception of the drug-induced flashbacks) it turns out that those years on the road were not wasted. A background in live theater and show production translates quite well to the museum industry, and that's what this article is about. I was approached to write this not long after the December 2006 opening of the National World War I Museum in Kansas City, MO. The editor had interviewed me about

the project, and she sniffed out my stage production background when I blithely uttered the words "rough swag" (not the same kind of swag that rock bands give out). The \$102 million renovation of the museum was conceived by renowned designer Ralph Appelbaum. As project manager for Electrosonic, I was in charge of the multimedia design/build team for the project. (We roadies can actually hold down real jobs now that we have wives and children to support.)

*by Thursby Pierce*

There are many similarities between what I currently do for Electrosonic and my past life



The fabled speaker spill.



**The Horizon Theater at the National WWI Museum**

on the road. In today's world of high tech systems integration, much of what we do is driven by the same brains that think up the blue-sky ideas for theatrical productions. That's because museums, theme parks and cultural centers draw from the same pool of creative and technical people to bring their ideas to fruition. Today's museum designers are pushing us right up against the bleeding edge of what technology can handle, to tell their stories in the most effective ways. This brings my background into play, because the touring entertainment industry has always been a testing ground for new technology. Entertainers are always willing to take the big risks to entertain their fans, and we technical managers and engineers who live in the real world are there to ground these people with reality. In the same way, theater producers count on us to help them identify the most exciting solution that is both show-stopping and practical - and then pull it off. The difference is that now, instead of puzzling over how to hang a gigantic, animatronic skull over a stage full of heavy metal rockers, I am working with our engineers to figure out how we can blend six projectors together to get a seamless image that is 200 feet wide.

Today's museum exhibits feature plenty of interactive, touch-sensitive, sensory, stimulating learning experiences in keeping with the media-rich world in which our public now lives. Accordingly, more and more we're called upon to install large, immersive theater systems to thrill visitors (while educating them and spurring them to think about

things) and bring them into an exhibit much as a live show draws an audience in and makes them forget their surroundings and exist in a different world for a few hours.

### **Theatrical Horizon**

At the WWI Museum the highlight is the Horizon Theatre. Visitors walk out onto a balcony and gaze out upon a 125-foot wide, full-scale battlefield mock-up/tableau with genuine period artifacts - complete with mud, downtrodden soldiers, craters and blown-up bits of cannons and caissons. Behind that, as a backdrop to the tableau, is a 100-foot-wide by 25-foot-tall projection surface. The designer of the show, Donna Lawrence (Donna Lawrence Productions) elected to use a scrim-like material swagged (there's that word again) with rough pleats and draped to give it an old-world feel. Most of the content imagery is authentic film and still footage from the era, edge-blended with multiple projectors, and most everyone on my team expressed doubts about how it would look on this surface. But when we began image testing on the screen, it became apparent that it was going to work very well and that it would be a very moving, theatrical experience. Donna and her team did some amazing things with the content, telling the story of how the US and the rest of the world were affected by this global conflict that was supposed to be "The War to End All Wars." They developed some content specifically for the moving head, digital lighting/video projectors that were part of a dynamic system specified by the

lighting designer, Technical Artistry. The lighting effects were employed to great dramatic effect, using static theatrical lighting, moving light fixtures and the digital projectors to complement the video presentation. Much of the technology in that theater could be used on the next U2 world tour.

As we worked through the design and installation of the Horizon Theater we found it both natural and useful to employ standard stage terms such as "upstage" and "downstage," "stage right" and "stage left" in order to identify points on the lighting trusses and where images would be projected. Some of the people on the project had not worked in a stage environment, and didn't know stage left from house left. The lighting designer and I had to translate these coordinates for them. This is often a typical situation because of that common creative talent pool I mentioned earlier, that everyone draws upon. On the teams, in the trenches, and on the conference calls of the production process for the modern museum exhibit are teams peopled with crossover show directors, designers, producers and technical integrators who also work on film, video and theatrical productions, and in entertainment venues such as theme parks. With their various backgrounds, part of the process is finding a common language so they can talk about the project.

#### If It Were Easy...

While their terminology may vary according to their backgrounds, those crossover team members all know the conceptual process and the production/installation drill. The various phases you go through to design, build and install complex technology systems in a museum are the same as when you plan a tour with a rock'n'roll band or plan an attraction at a theme park. You have many conference calls discussing the creative intent. Drawings are passed back and forth; considerations are made for the particular venues' regarding facility impact. Specialists such as acousticians, scenic designers and effects consultants are all brought in to help through the process. Planning a museum renovation is no different.

In the theme park and road show environments you learn a great deal about the durability and reliability of the various pieces of equipment used in today's multimedia systems. At the theme parks, operating hours are typically 12 hours per day off season and up to 18 hours per day during the busy seasons. We generally recommend that our systems be left powered up 24/7. You have a considerably lower MTBF rate, (Mean Time Between Failure), if you're not switching everything off every night and then expecting to bring it all up cold in the morning. Places where you have guest or operator interfaces such as touchscreens or switch panels, you have to consider the amount of cycles the particular unit or part can withstand. You would be amazed at how many of the clients we work with require such devices to handle millions of cycles before failing.



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On the road, you have to take into consideration all of the abuse the gear takes in the trucks, packing and unpacking every day. Outdoor venues can be very dusty, dirty, hot, or - worse yet - wet. We have to consider the same parameters when specifying equipment for a museum exhibit. Is it spill-proof? Can the 10-year-old child with the sticky hands and a slushy find his way to the Internet through the touchscreen? Is the item safe for any guest to be near or under, to touch, push or generally interact with? Show and theatrical people bring this experience with them to the museum industry. We are all tasked with outdoing what was done before. Push the envelope with the technology; make it bigger, better, more exciting than the guy down the street. My general manager at Electrosonic keeps challenging us with the words, "If it were easy, everybody could do it." So we former roadies and theatre techs will continue to produce for our clients what was thought impossible only yesterday, and make their museum exhibits meet the expectations of the creative folks, and, ultimately, the museum-goers of the world. ■■■



*Thursby Pierce, Carefree Roadie*  
Thursby Pierce's career in live production commenced in 1979. He was production manager for a friend's band (Full Moon) touring the northeastern US for several years. In the early 1980s he began working as a system engineer on multimedia systems for theatrical and industrial productions throughout the NYC metro area. In 1984 he hit the road again, in demand as an audio engineer/production manager for a number of top touring acts, including Anthrax, Blondie, Deep Purple, Iron Maiden, Kiss, Ozzy Osbourne, The Ramones, and Reba McIntire.



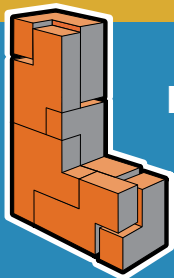
*Thursby Pierce, Project Manager & Breadwinner*  
ThursbyPierce(thursby.pierce@electrosonic.com), project manager for Electrosonics Systems Inc., has more than 25 years of multimedia entertainment technical show and project experience. During his "roadie" years, in addition to being a sound tech he acquired familiarity with laser special effects, lighting and film projection. He was part of the Universal Studios creative technical team that designed and built Islands of Adventure in Orlando, and then spent two years as one of the technical project managers for Universal Studios Japan, building the Spider-Man attraction. Other recent projects include Ringling Bros. Circus Museum, World of Coca-Cola Museum, Smithsonian National Zoological Park, Singapore Discovery Center, Restless Planet Theme Park (Dubai), Hard Rock Café (San Juan) and Adidas America Corporate Center.

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**"Real Pirates, Real Treasure"  
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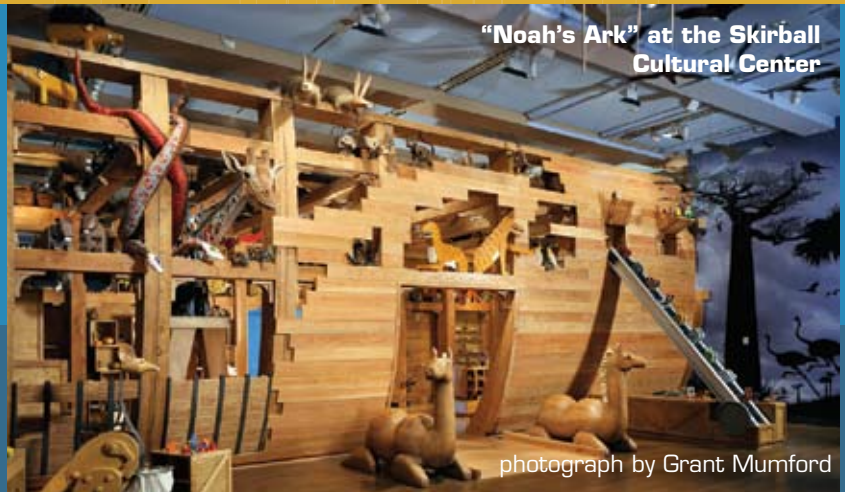


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