

Hope for the Best but Prepare for the Worst

The Responsibility of A/V Professionals and Related Trades in the Face of Disaster

It's been a bad summer for concert-goers. In July, a stage collapsed at the Ottawa (Canada) Blues Fest, sending three to the hospital. On Aug. 7, the lighting rig collapsed prior to a Flaming Lips concert in Tulsa, Oklahoma, with fortunately no injuries. On Aug. 13, the stage at the Indiana State Fair collapsed in between performances, killing seven and injuring 43. Then, on Aug. 18, one of the stages at Pukkelpop -- a music festival in Hasselt, Belgium -- collapsed, killing five and injuring 75.



In each of these incidents, severe weather -- high winds or thunderstorms -- played a major role in the collapses. Of course, when you are dealing with outdoor concerts, festivals and venues, weather is a major consideration, and safety for performers and concert-goers should be paramount. Unfortunately, particularly in the case of the Indiana collapse, there seems to be no one authority to take responsibility for the incident. There are no national standards or procedures in place for rigging safety or inspections of outdoor concert venues. In the Indiana case, there are local safety standards and inspection policies in place, but they don't apply or cannot be enforced on state property -- like the fairground.

In the immediate aftermath of the collapse, there was no single entity at which fingers could point and say, "This was your fault." Indeed, no one seems exactly sure who is responsible for the safety of the stage -- the fair management, the company providing the rigging, the state itself. The investigations into this summer's tragic collapses are only in their earliest days, and it may be some time until we find out exactly how and why they occurred, but in their aftermath, as audio and video professionals, we need to take a step back and look at our own practices and policies to make sure that we are not party to a future tragedy like these.

This year at InfoComm 2011, for the first time in my memory, the show featured hourly rigging and staging demonstrations to highlight safety and best practices. The demos were sponsored by IATSE -- International Alliance of Theatrical Stage Employees, Moving Picture Technicians, Artists and Allied Crafts of the United States, Its Territories and Canada -- the trade union representing technicians, artisans and craftspersons in the entertainment industry, including live theater, motion picture and television production, plus trade shows. The demos were supported by the ESTA Foundation -- an organization whose primary goals are to fill an industry-wide need for practically educated and trained entertainment technicians, develop public and governmental awareness of the entertainment technology career path, and to assist industry professionals in times of crises -- and by PLASA -- a membership organization working to raise standards, improve skills and strengthen the events, entertainment and installation industries.

As an organization, PLASA has collaborated in creating standards worldwide. In North America, they've created the ANSI-accredited Technical Standards Program that developed many applicable standards on rigging, theatrical stage safety and lighting control protocols, among others. Several of these standards apply directly to outdoor concert venues and stages -- particularly ANSI E1.21 -- 2006 (Temporary Ground-Supported Overhead Structures Used To Cover Stage Areas and Support Equipment in the Production of Outdoor Entertainment Events). This spec explicitly mentions seismic load, wind load, and "superimposed loads such as rain, snow, ice, etc." as considerations. Were these standards in wide use, or even adopted by states as the de facto standard for rigging, tragedies like the Indiana fair collapse may not have occurred.

Now, again -- the investigation into the causes of the recent collapses is just beginning. There is no evidence as yet that there were problems in the rigging of those stages, or with inspections, or with negligence of any sort. However, it

behooves us, as professionals, to know about such standards, industry best practices, as well as any and all applicable state and local regulations and guidelines that cover rigging, staging and even fixed installations. It is our responsibility as professionals to be aware of OSHA regulations and make sure that our installation and staging technicians obey them. It is our responsibility as professionals to have trained, certified and/or licensed people on staff to take care of the electrical... or the rigging... or the whatever-else that comes up on a job site that requires specialized skills. As Rob Connelly wrote in Church Production Magazine, "Rigging for loudspeakers, lighting fixtures or scenery pieces should never be attempted by amateurs, and yet we can all think of examples where we've "MacGyver'd" something in one of those categories." The same is true of fixed installations. I'm sure we've all walked into a project and just shook our heads in amazement at what sort of existing system is in place -- through ignorance, cost-savings or an over-inflated confidence in the power of DIY.

Ideally, the industry would agree to adopt a fixed set of standards and police itself, but if history has shown us anything, in the days, weeks, months and years after this terrible summer, there will be an increased call for local governments, state governments and even the federal government to address the issue of standards, guidelines and responsibility for these sorts of venues. If this happens, it would be best for the states to adopt existing standards like the PLASA standards because these standards were written by people who actually do this for a living. The alternative is the adoption of new code written by committee by politicians and their aides -- a recipe for major headaches at best and disaster at worst. As professionals, we need to do all in our power to prevent such tragedies from occurring again -- through education of our customers, certification and best practices adoption by our staff and our colleagues, and advocacy of accepted standards in our governmental agencies. With each new project, we hope for the best, but we always prepare for the worst.

To read and review published documents of the PLASA Technical Standards Program, visit
http://tsp.plasa.org/tsp/documents/published_docs.php

To read a number of technical white papers on rigging and structural safety, visit
<http://www.irclancy.com/riggingssystemdesignarticles.asp>

To read OSHA standards, visit
http://www.osha.gov/pls/oshaweb/owasrch.search_form?p_doc_type=STANDARDS&p_toc_level=0&p_keyvalue=&p_status=CURRENT – Standards for rigging are in section 1926.

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