Three tiers of safety
Creating safer venues for all

In 2011, Chicago Flyhouse started a new division called Safer Venue. This division was created to focus on one goal—hopefully obvious by its name—to create a safer venue for all performance related environments. We knew our clients were focused on making their staff and venues safer, but they also needed some qualification of what that actually meant. It was immediately clear how important our affiliation with ETCP was. That’s when we decided to ensure that our entire staff be ETCP certified and our training program ETCP Recognized as well. I became an ETCP Recognized Trainer and we have continued to pursue our original goal of making every venue—safer. That could be the end of the story, but in fact this very practical decision led to us thinking about our Chicago Flyhouse, Inc. standards and how they relate to our entertainment industry standards, OSHA, ANSI, PLASA, etc.

To be certified denotes a level of expertise. And that drove us into creating standards of safety for our clients—to improve the quality of services they received and ensure there was a common standard for all parties. Having standards allows us to turn to a known piece of information and use it to answer all questions. But we are still missing something. What is it? Why are people still getting hurt in the industry? Let’s use an everyday example of a driver’s license to ponder this question.

So you have a driver’s license—does it mean you are a good driver? Of course not, but it does mean you possess the knowledge of how to turn on the car, drive down the road, parallel park (maybe), use your turn signals, stop at traffic lights, and obey the rules of the road. Does it mean you will do all those things? Ultimately, that’s up to the driver and how much responsibility they take for the safety of themselves and others. Learning how to be safe is only one part of the system.

In our Safer Venue training classes by Flyhouse, we teach three tiers of safety. Without these three tiers, you do not have a safety system. Here is how it breaks down, and why we all need to participate in safety. Let’s go back to our driver analogy to help explain.

Tier 1: The pedestrian. While a pedestrian may not have a driver’s license, a pedestrian is still part of the overall system and needs to pay attention while near roadways. If they remain on the sidewalk then they are generally safe. However, when they decide
to cross a road, they have to look both ways and interact with traffic to be sure all is clear to allow them a safe path. This is something we learn in our schooling and through the knowledge we gain by general life experience.

Tier 2: The car driver. A person driving a car has to pay attention at all times to ensure they do not drive into something. After all, they are controlling an object weighing multiple tons that could cause serious injury or death. The constant awareness required of everything around them, and the object they are controlling, allows them to not hit something. This is so important that every country requires a license for someone to drive.

Tier 3: Equipment safety. There are safety features in place to help keep everyone safe. There are traffic lights, stop signs, back up sensors, and seat belts. All of these things aid in safety but only if Tier 1 and Tier 2 are paying attention. A driver can drive through a stop light and a pedestrian could easily cross the street without looking both ways. Tier 3 safety features are attempts to increase the safety and can only reduce the chance for accidents—these features alone can’t prevent accidents. Keep in mind, Tier 3 only works if our pedestrian and our driver received the right training and are focused on being safe.

So, let’s bring this back to the entertainment world and our venues.

Tier 1: The performer. This can also be anyone else on the stage. It is the responsibility of those on the stage to know the blocking of the show and where it is safe to stand and what may be moving around them.

Tier 2: The technician. The technicians operating the automation and/or rigging systems need to maintain a clear line of sight to everything they are controlling.

Tier 3: Equipment safety. This would include all the safety features built into the automation system such as safety edges, load sensing, the feel of resistance on a counterweight system, etc.

So what is the solution to keeping everyone safe?

The only real way to keep everyone safe is to educate everyone on the systems in place and the breakdown of the safety tiers. Currently, the industry is certifying technicians through ETCP and this is an incredible improvement in our industry, but that only takes care of Tier 2. Our industry has done an amazing job of developing standards through PLASA’s Technical Standards Program for the safe use and manufacture of equipment, interconnectivity, and communications (Tier 3), but this isn’t enough.

Tier 1 has been almost completely ignored, Tier 2 mainly focuses on technicians and their interaction with components, and Tier 3 is focusing on equipment versus practice. As an industry, we are behind in our safety responsibilities. It’s easy for anyone who has been around awhile to say that we are safer or being too safe, but that’s wrong. We are still very far away from a safe environment and we continue to miss some of the most important parts. We are excluding ourselves in our tiny trade within this tiny (niche) industry to figure these things out. Instead, we should be reaching out to all aspects of our industry and pulling together.

Having taught various levels of safety to nearly 2,000 people in the entertainment industry in the last few years, I have noticed some consistencies that make a venue unsafe. The problem most responsible for incidents is not the unsafe swage on a wire rope, or the improperly wired lighting instrument, instead the problem most responsible for incidents and accidents is the process which each of these venues goes through every day they put on a show. Some examples may be:

- The technician doesn’t watch an object moving or have extra eyes on all aspects of the object.
- The equipment is not functioning as intended.
- The equipment safety features are not working, or worse, disabled.
- The wrong cue is fired.
- Equipment is connected incorrectly or not removed from the stage at the right time.
- Connections of hardware during the show are not checked after they are connected.

So, what can we do as ETCP Certified Technicians? We can teach, teach, teach. Teaching is not only for the trainers to do while in a meeting room in a hotel near an airport. Teaching is something that has to happen every day. Teaching the performers what is happening above and around them during a show. Teaching an aerialist how their flying hoist works and how the inspection process is done every day before a show. Teaching means bringing together the performers and the technicians to create a Safer Venue for everyone. No matter how many times I check the tire pressure and oil level on my car, it won’t prevent me from hitting a pedestrian that crosses the street on the wrong signal. If everyone is not involved in safety, then nobody is safe.

Mark Witteveen has deep experience in overseeing and implementing safety programs, both nationally and internationally. In his role as principal of Chicago Flyhouse, Inc. for over 17 years, he has written numerous rigging safety and fall protection plans for the theatre industry, construction projects, and the cruise line industry. He attended DePaul University where he studied Theatre Technology.