

BY SHANE KELLY

## Who is inspecting your rigging system?

AS THE SUMMER WINDS DOWN, with it goes the secondary school rigging inspection season. Many schools take advantage of the slower summer season and, for some, change in fiscal years, to schedule an annual inspection of their school's rigging system. Who is conducting that inspection is just as important as conducting an annual inspection. ANSI standard E1.47-2020, Entertainment Technology—Recommended Guidelines for Entertainment Rigging System Inspections outlines "inspector qualifications and responsibilities, scope and frequency of inspections, content of the rigging inspection report, and related information concerning the inspection process." Looking specifically at the inspector qualifications, I argue that, while it is not specifically called out in the standard, having your rigging system inspected by an ETCP certified rigger will yield the best results.



The author inspecting a swage sleeve termination with a Go-Gauge. Photo credit: Avery Spellmeyer.

The ANSI standard states that "The inspector should have a minimum of five years or 10,000 hours of experience...." In order to qualify to sit for the ETCP rigging exam, one must have achieved 30 points as determined by the combination of work experience and education. A maximum of ten points can be achieved by education, so riggers must have 20 points worth of work experience at one point per 100 hours worked. Given this calculation, it is clear the ANSI standard hours amount is greater than the minimum needed to sit for the ETCP exam, and so riggers who qualify for the ANSI inspection criteria can qualify to sit for the ETCP exam. The ANSI standard also calls out that the inspector's experience "should include third-party certification in the applicable discipline," and ETCP certification is the industry leader in that variety of certification.

Beyond mere qualification for the exam, ETCP certified riggers must re-certify every five years, and, in order to do so, must com-



A shackle with mousing wire that has not been twisted secure. Photo credit: Shane Kelly.

plete a minimum amount of continuing education credits, which could be as few as ten hours of class but is often many more than that. Continuing education allows ETCP certified riggers to keep pace with changes in hardware, standards, and practices in the industry throughout their careers. ANSI standard E1.47 also includes the statement, "the inspector should continue professional development throughout the inspector's career." While you will likely find riggers with years of experience who are not ETCP certified, the ETCP certification confirms that certified riggers have kept up with their education and conform to the ANSI standard guidelines.



A trim chain with a safety bolt installed. Photo credit: Shane Kelly.

Now in my 14th year as an ETCP certified theatre and arena rigger, my 8th year as a recognized trainer, and my 25th year as a rigger, I am still regularly learning and finding new information. And that gathering of continuing knowledge makes us—as certified riggers—outstanding inspectors for a rigging system.

I know of several venues that conduct their own in-house rigging inspections. While they may be conducted by ETCP certified riggers, having an outside point of view will yield better results. I am sure you can think of something in your life you have become accustomed to—maybe the ding in your car door, the place in your house where the Wi-Fi drops out, or the lineset that makes a "kinda funny noise" when operating. You know on some level they are there, but these items are not at the top of mind or even in your consciousness until someone else points it out to you—a friend asks if they accidentally dinged your car when borrowing it, a guest can't figure out why they are unable to stream their favorite show, or an outside technician operates your "kinda funny" lineset and asks what is wrong with it. The external point of view brought by an ETCP certified rigger who is new to your venue will help find the things you've become accustomed to in your dayto-day operations so they can be repaired or replaced. It is also important to change up your rigging inspectors. If the same rigger inspects your system every year, they run



A lift line termination with incorrectly installed wire rope clips. Photo credit: Shane Kelly.

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the risk of becoming too accustomed to the system. I just completed an inspection where my host said: "See you in two years! I'm using a different certified rigger next year." The ETCP website allows users to search for ETCP Recognized Contractors, Employers, Labor Providers, and Technicians to expand your pool of potential inspectors. Not every contractor, employer, provider, or technician conducts inspections, but they probably all know an ETCP certified rigger who does.

Jay O. Glerum said that rigging system inspection is like *Sesame Street*'s "One of These Things (Is Not Like the Others)." We are looking for inconsistencies throughout the system. Sometimes that inconsistency is one incorrect piece of hardware or one correct piece of hardware. Experience, knowledge, and continued training helps us see those inconsistencies and understand the next steps for a venue to take in pursuit of the ultimate goal of having a safe space for everyone who enters the venues, such as artists off and on stage, audience members, and guests.

I've inspected a variety of venues, from those that recently opened to those with rigging systems that share my birth year. Every system includes some areas for improvement and repair. It might be in the new system that the installer forgot to mouse (secondarily secure) a piece of hardware (while installing over 500 shackles), or that in an older system a trim chain is secured with "safety bolts," a practice that once was standard but is now discontinued. It can even be the set of life lines where the wire rope clips are installed incorrectly because they "saddle the dead horse" with the wire rope saddle on the dead line. Experience as a certified rigger also helps us track down the "kinda funny" sound, which might be a lift line rubbing on the outside of a loft block, misaligned guide tracks, or seized bearings in a sheave. An ETCP certified rigger with inspection experience is going to be highly adept at seeing problems and

finding the root cause of others.

For venues that are planning and budgeting for inspections, it is important to also consider planning and budgeting for repair. The inspector's report will include information about the urgency of repairs and maintenance that should be performed on the system—my reports usually list items as "Urgent," "Necessary," or "Basic"—and a venue is not upholding its commitment to safety if recommended repairs are not conducted. Repairs should also be conducted by an ETCP certified rigger who specializes in or works for a company whose specialty is repair for the venue's particular system.

Experience from years of rigging, knowledge from continued education, and understanding of ANSI and OSHA standards applicable to rigging systems support ETCP certified riggers in advising venue operators on how to maintain, repair, and operate their systems in the safest manner possible. Having an ETCP rigger inspect and repair a venue's rigging system is an assurance that a knowledgeable and competent person is caring for the safety of the venue's users.

A safe theatre is an inclusive theatre. It welcomes everyone into the space and allows creativity to thrive.



Shane Kelly (he/him) is an ETCP certified rigger (arena and theatre), ETCP recognized trainer, OSHA general industry outreach trainer, American Red Cross authorized training provider, and a member of

the ESTA Technical Standards Program Rigging Working Group. He conducts rigging inspections and repairs via his company, Shane Kelly Rigging, LLC. Shane serves as Professor and the Head of Theatre Technology at The Theatre School at DePaul University. He is the co-author, with Jay O. Glerum, of *Stage Rigging Handbook*, *Fourth Edition*.