BY **KARL G. RULING**

Día de Muertos and other remembrances

José Guadalupe Posada's depiction of La Calavera Catrina.

¡RECORDEMOS A LOS QUE SE HAN IDO ANTES que nosotros! Let us remember those who have gone before!

I'm writing this in November, a month that starts with All Souls Day, a religious holiday celebrated in Mexico as *Día de Muertos,* a day when people gather to remember friends and family who have died—more to celebrate them than to mourn. In the middle of the month is Veterans Day, a day honoring all veterans, both living and dead. And between *Día de Muertos* and Veterans Day this year, Kamala Harris gave her victory speech, in which she honored her mother, Shyamala Gopalan Harris, and "the generations of women—Black women, Asian, White, Latina, Native American women who throughout our nation's history have paved the way for this moment tonight. . . . Tonight, I reflect on their struggle, their determination, and the strength of their vision—to see what can be, unburdened by what has been. And I stand on their shoulders."

Harris's standing "on their shoulders" trope is often attributed to Isaac Newton, writing in 1675, "If I have seen further it is by standing on the shoulders of Giants." However, the metaphor was attributed to Bernard of Chartres in John of Salisbury's Metalogicon about 500 years before Newton. When you start chasing the origins of ideas, the beginnings fade into the past.

In an early version of Michael Lichter's story in this issue of *Protocol* about the European stage machinery standard, *EN 17206*, he noted that it drew on *CWA-15902-1*, and that *CWA-15902-1* and ESTA's *ANSI E1.6-1* are similar documents. It's not surprising. Some of the people who worked on *CWA-15902-1* also were members of the Rigging Working Group, working on *E1.6-1* at the same time. However, before we get into a "Who was first?" argument, it must be noted that *ANSI E1.6-1* is part of a larger ESTA powered rigging project, started in 1997, based on section 5.4 of an older document, *USITT Rigging and Stage Machinery Standards*. On my hard-drive is draft six of that USITT document, dated 2 October 1991. There were five earlier drafts, built on previous drafts, built on the knowledge of its authors, built on the knowledge of legions of people before them. There is a committee list in draft six. Some members are still active in the industry; some are retired; some are dead—but their work remains.

Origin stories are stories. Nothing comes from nothing. Everything is built on what went before. ESTA's Technical Standards Program now has 64 American National Standards, five less formal guidance documents, and many more standards in the process of being developed or revised. The Technical Standards Program stands on the shoulders of Giants.

Seven of the Technical Standards Program's working groups met from October 13 through 19 via WebEx, using that tool developed by Cisco Systems to advance our projects. Following is a summary of the projects the working groups discussed and moved forward.

Control Protocols Working Group

Forty-two people participated in the online meeting October 14, connecting from various places across Europe and North America, spanning nine time zones. My last TSP News mentioned a third public review of *BSR E1.59, Entertainment Technology – Object Transform Protocol*. That review ended just before the CPWG meeting but had no comments, so no comment resolution document had to be rushed to the working group for consideration. A motion was made to accept the last draft as an American National Standard. The voting for that is going on now. We have one voter voting Yes, but asking for additional features to be added, but he's asking for this to be done after this edition is approved.

The working group also voted to start the process of reaffirming *ANSI E1.37-2 – 2015, Additional Message Sets for ANSI E1.20 (RDM)*

– Part 2, IPv4 and DNS Configuration Messages. The standard provides additional get/set parameter messages (PIDs) for use with the RDM (*ANSI E1.20*) protocol. The messages are for configuring network interfaces, routing information, and Domain Name System settings on devices with IPv4 addresses. The reaffirmation process requires that the working group vote by letter ballot on the motion and that we offer the standard for public review. No one commented in the public review, but some people in the working group voted against the reaffirmation, pointing out errors and omissions. That effectively puts the reaffirmation on hold until we can discuss the objections, try to find a resolution, and then give voters a chance to reaffirm both their reaffirmation votes and the attempt to resolve the objections. It's a process even more lengthy than a contested US presidential election vote count.

Work is continuing on deciding how we might use GitHub as a standards development platform. It's recognized as good for software development, but the primary function of the Control Protocols Working Group in ESTA's Technical Standards Program is to write American National Standards, not software. Could we fit it into the formal standards development process without making a document and vote tracking nightmare, or should it be a parallel effort, where we see if what we say "shall be done" in a standard actually works? This could fit with the work being done to identify which of our standards will need either modifications or an addenda to secure "connected devices" against unauthorized intrusion or data loss, as is required by California's *Title 1.81.26, Security of Connected Devices*. We'll want to make sure that the security strategy works without make the timely transmission of cue information unreliable. A refrigerator reporting an open door minutes late is no problem, but an end-of-scene blackout that late is.

Electrical Power Working Group

Twenty-three people from across the USA and Canada connected to participate in the EPWG meeting on October 16. Most of the meeting was discussing issues still to be addressed in revising the 2015 edition of *ANSI E1.19, Recommended Practice for the Use of Class A Ground-Fault Circuit Interrupters (GFCIs) Intended for Personnel Protection in the Entertainment Industry*. The working group had decided that references to dimmers with built-in GFCI would need to be removed because there are none now being sold in North America—at least, not as new equipment. (See Richard Cadena's story about GFCI and dimmers in this issue of *Protocol*.) However, this led to discussions of GFCIs feeding dimmers or being fed by dimmers. The EPWG had a new member join—really a returning member—whose company provides GFCI protection equipment for the motion picture industry, and this equipment can be used with dimmers. These GFCIs are not neighborhood hardware store items, but they exist and work. It was an interesting discussion—and I do not mean that facetiously—but it showed that the draft text the working group had for the meeting needed reworking. More to come in January!

Event Safety Working Group

The Event Safety Working Group had 32 participants from across Europe and North America at its meeting on October 16. *BSR ES1.7, Event Safety – Weather Preparedness*, had been offered for public review through September 20. It received two "yes with comments" responses. A set of comment resolutions was discussed and accepted. They made no substantive changes to the draft standard; the working group is now in the process of voting to accept the document as an American National Standard. The resolutions have been sent back to the commenters so they know we considered them and made changes—and if we got it totally wrong ("That's not what I meant!") they can tell us.

The working group also approved the first public review of *BSR ES1.4, Event Fire Safety Requirements*. It's in public review now, through January 11. The standard is to identify and describe the steps necessary to establish a reasonable level of life safety and property protection from the hazards of fire, explosion, and dangerous conditions at a live event. It will be interesting to see how the public review works out. A lot of the advice can be found in other standards (much knowledge is really old knowledge), but this standard is written for people doing live events. It doesn't contradict what those existing standards say, since they are likely to be referenced by the local Authority Having Jurisdiction and offer good advice, but it saves concert producers from having to read and then skip over, for example, advice about storing ammonium nitrate (*NFPA 1*, Chapter 74). It also can help them think about better ways to do things, and not simply things they shall or shall not be permitted to do.

Floors Working Group

Six members of the Floors Working Group in North America (USA and Canada) met online on October 14. The main item of work was addressing the public review comments on the draft standard *BSR E1.62, Minimum Specifications for Mass-Produced Portable Platforms, Ramps, Stairs, and Choral Risers for Live Performance Events*. The last public review, the sixth, netted one "Yes" and one "Yes with comments" response. The resolutions accepted one of the comment suggestions and rejected the second. The one comment accepted changed the order of listing some standards. That's it. That's not a substantive change, so the working group is now in the process of voting to accept the document as an American National Standard. The initial ballot period ended with seven Yes votes, and one "Yes with comments," which is a Yes, but it triggers a two-week extension so people can consider the comment and change their votes if the comment motivates them to do so. The comment doesn't say we

would do better to change the standard, but voters need a heads-up that one of them had something to say relevant to the standard's requirements.

Photometrics Working Group

Ten people connected on October 14 for the Photometrics Working Group meeting and pushed three documents forward. *BSR E1.54, ESTA Standard for Color Communication in Entertainment Lighting*, and its companion document, *Explanatory Notes to E1.54, the ESTA Standard for Color Communication in Entertainment Lighting,* were approved by the working group, which declined to take up reconsideration of the objections of one public review commenter. The documents were subsequently approved by Technical Standards Council and the Executive Committee of the ESTA Board. It will be submitted to ANSI soon.

Most of the meeting was consumed with addressing public review comments for *BSR E1.69, Reporting the Low-End Dimming Performance of Entertainment Luminaires Using LED Sources*. The draft received 70 comments—constructive comments. The working group approved a set of comment resolutions and a revised draft, with the draft being understood as an implementation of the changes resulting from the comments, but it is **not** a draft ready for another public review. Members of the working group want to be more specific on the testing procedures for different dimming schemes and how to measure the output of very large diffuse sources, such as ARRI SkyPanels, which have apertures as large as 1280 x 870 mm. We also need to define "unstable" or "instability" to describe the erratic flashing that happens with some luminaires at low settings, while distinguishing that phenomenon from the subtle flicker that might be an artifact of the dimming method.

Rigging Working Group

Sixty-four people joined the WebEx meeting October 13. The Rigging Working Group heard reports about more than a dozen projects, and four were moved into public review and are in review right now, even as I type, until December 15, at http://estalink.us/pr.

One public review is for the reaffirmation of an existing standard: *ANSI E1.15 – 2006 (R2016), Entertainment Technology – Recommended Practices and Guidelines for the Assembly and Use of Theatrical Boom and Base Assemblies*. The "2006" tells you the date of its last revision, which is its original publication date since it has never been revised. Incidentally, the tip-test in *E1.15* is borrowed from the 1996 edition of *DIN 15560-27*. That standard has been superseded, but the test is still useful.

The other three public reviews are for revisions of two existing standards and a new standard. *BSR E1.67, Entertainment Technology – Design, Inspection, Maintenance, Selection, and Use of Hand and Lever Chain Hoists in the Entertainment Industry*, is the new one, and it covers hand-operated chain- and lever hoists. These are used a lot in Europe and also in North America on smaller truss systems, for example, those used in hotel ballrooms. *BSR E1.2, Entertainment Technology – Design, Manufacture, and Use of Aluminum Trusses and Towers*, is the second-oldest RWG standard. A major change has been to rework the user information so that people don't assume that catalog load tables are valid for every situation in which the units might be used. Make a big grid, put it up outside, don't guy the towers securely, and then let the wind blow—all bets are off. *BSR E1.39, Entertainment Technology – Selection and Use of Personal Fall Arrest Systems on Portable Structures Used in the Entertainment Industry*, is about what the title says. It's being revised to keep up with the standards it references and to continue to be useful.

Stage Machinery Working Group

Twenty-four people joined the online Stage Machinery Working Group meeting on October 15. Task group progress reports were heard for four on-going projects: *BSR E1.42, Stage and Orchestra Pit Lifts*; *BSR E1.64, Stage Machinery Motion Control*; *BSR E1.71, Curtain Machines*; and *BSR E1.72, Floor Machines*. The longest discussion was about *E1.42* and how rules and recommendations should be different for temporary as opposed to permanent lifts. Another fairly lengthy report was about *E1.71, Curtain Machines*. The task group has started work from *ANSI E1.6-1*, removing from that standard's text clauses that are not necessary for curtain machines.

A call for members

You can become part of the team of people working to make the entertainment industry simpler, safer, and more profitable by joining a working group. At this time, the following working groups are looking for new voting members in these particular interest categories, to help balance the interests in the working group.

- **Control Protocols**: General interest, dealer/rental companies
- **Electrical Power**: Designers, but really anybody but users
- **Event Safety**: Performing artists, insurance companies—anybody but general interest
- **Floors**: Designers, dealer/rental companies
- **Fog and Smoke**: Dealer/rental companies in particular, but anybody but users
- **Followspot Position**: Producers of any type, dealer/rental companies
- **Photometrics**: Dealer/rental companies, designers, general interest
- **Rigging**: General interest
- **Stage Machinery**: Dealer/rental companies, users

"Interest" means how the work of the group affects your livelihood or your health, and not that you find it interesting. The interest categories are relative to this material affect and to the subject matter of the working groups. Definitions for the interest categories can be found on the second page of the working group application forms, which are available at https://tsp.esta.org/tsp/documents/procedural_docs.html. Check them out—and see if any of the working groups fit your interests and expertise.

The next set of Technical Standards Program meetings is not scheduled yet, but we are looking at the last week of January 2021. That's late enough to avoid interfering with NAMM's *Believe in Music* online event, but shouldn't interfere with Groundhog Day. (See https://esta.org/ESTA/meetings.php) Until the COVID-19 pandemic ends, the meetings will be via WebEx—and maybe thereafter. Staying in the office is a lot less expensive than traveling across North America or the Atlantic for a meeting—but perhaps the online meetings will make us deeply appreciate people when we finally meet again, whether they be giants or little people. ■

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