



Happy Baisakhi! हैप्पी बैसाखी!

IN THE LAST TSP NEWS, I wished you a Happy New Year by the Chinese lunar calendar; now I wish you a Happy New Year by the Hindu lunisolar calendar, celebrated as Baisakhi in the Punjab, Bihu in Assam, and Puthandu in Sri Lanka. Baisakhi is a harvest festival in the Punjab; Baisakhi greeting cards show happy people dancing and in golden wheat fields, heavy with

grain. Spring! It snowed in Connecticut last weekend (Passover/Easter weekend!), and I have a \$3,700 bill for six weeks of snow plowing for a 24-space parking lot on my desk—but the snow is melting, and we will have warmer, brighter days, and soon harvests as bountiful as those celebrated in northern India.

But, not yet. PLASA's TSP had nine

productive meetings at the USITT Conference in Cincinnati, meetings that pushed a lot of projects forward, but not quite to the point where we can call them “done” and celebrate our harvest. We are still working through the action items from those meetings, but the to-do lists, filled out a bit, will give you an idea of what's news.

Control Protocols Working Group

The latest version of BSR E1.17, Entertainment Technology – Architecture for Control Networks (ACN), EPI 19, ACN Discovery on IP Networks, went through its second public review and received no comments, so no changes need be made to satisfy the materially affected public. A motion was made at the CPWG meeting on March 19 to formally approve the revised version as an American National Standard. Final approval has to be decided by letter ballot. So far the votes cast all Yes votes, and there are enough of them that if everyone who hasn't voted yet never gets around to voting, the motion still will pass.

The last TSP News reported that we'd published a new American National Standard, *ANSI E1.37-2 – 2014, Additional Message Sets for ANSI E1.20 (RDM) – Part 2: IPv4 and DNS Configuration Messages*. It was brand new, and also wrong. The CPWG has approved a fixed version for public review, and the TSC is in the process of voting to approve that public review motion. Unless the TSC finds show-stopping defects in the new version (unlikely), it should be in public review by the time that you read this notice.

Electrical Power Working Group

At the EPWG's March 18 meeting, the working group had a set of draft resolutions for the public review comments on BSR E1.51, The Selection, Installation, and Use of Single-Conductor Portable Power Feeder Cable Systems for Use at 600 Volts Nominal or Less for the Distribution of Electrical Energy in the Television, Film, Live Performance, and Event Industries in Canada. The resolutions were discussed and modified, and then I was given the task of implementing the changes in the draft standard. The working group is voting by letter ballot now to see if (a) I made the

changes as they had agreed, and (b) that the new version, which is substantively different from the last version, is ready for another public review. So far, most of the votes are Yes. There is one No vote, but on a simple public review motion we don't have to draft a formal response to a No vote. All we have to do is allow people time to consider the reasons behind the No.

The working group also agreed to start two new projects. One is BSR E1.53, the how-to-hang-lighting-equipment-so-it-doesn't-fall-and-clobber-actors project described in the last TSP News column. A formal project request is being considered by the Technical Standards Council, which is charged with managing the Technical Standards Program and weighing the TSP's projects load with the resources available. The second new project doesn't have an alphanumeric or title yet and is still in the "exactly what is this about?" phase. *NFPA 70, The National Electrical Code*, in 520.10 says: "Portable stage and studio lighting equipment and portable power distribution equipment not identified for outdoor use shall be permitted for temporary use outdoors, provided the equipment is supervised by qualified personnel while energized and barriered from the general public." Okay, but what does a qualified person do when supervising equipment? What really is the best thing to do when the lights are up on Shakespeare in the Park and the rain pours down?

Floors Working Group

BSR E1.46, the recommended practice for the prevention of falls from stages and raised platforms, had been offered for public review, with a lot of people objecting to a recommended practice requiring anything. That is, a recommended practice could only suggest that people **should** devise plans to keep people from falling into orchestra pits. To an American "should" means "nice idea, but not necessary," so nothing would need to be done to claim compliance with E1.46. At the working group's March 21 meeting,

the resolution to those objections was to get rid of "recommended practice" in the title and make the standard be a standard that requires people to do something to prevent injuries and death. The document has been radically restructured, so it has mandatory requirements and those are followed by recommendations, things people might do to meet the requirements. The specific action taken to meet the requirements is not important as long as the requirements are met. The goal is no one writhing in pain at the bottom of an orchestra pit, not the excuse: "Well, I did what was required."

At the USITT meeting, the working group also reviewed a partial draft of BSR E1.57, Recommendations to Prevent Performer and Technician Falls On or Off Movable Parade Floats, Movable Stages, and Similar Moving Platforms. This document shares with BSR E1.46 the idea that the particular performers and technicians that are being protected need to be considered in devising the plan to protect them. That is, most safety regulations (e.g., OSHA regulations) assume a generic person of normal height and weight, but those assumptions don't necessarily work well if the people being protected are not of normal height and weight. A standard guard rail might only assure that a performer wearing cothurni lands on his head. It will probably be at least six months before a version of E1.57 is ready for public review, but look for it.

Fog and Smoke Working Group

Life in the fog is fairly tranquil these days. The main project discussed at the March 20 meeting is revising the *Introduction to Modern Atmospheric Effects*, the informational book that the Fog and Smoke Working Group first published 19 years ago. The fifth edition is in public review as I write this. (One item checked off the to-do list!) It's not much different from the fourth edition, but it makes clear that e-cigarettes and electric hookahs are not part of the

TSP Above & Beyond Awards presented in Cincinnati

The second annual Above & Beyond Awards were presented at the March Technical Standards Program meetings held in conjunction with the USITT Conference and Stage Expo in Cincinnati. The awards celebrate those volunteers that have made a significant contribution or effort over the previous year that advances PLASA's Technical Standards Program. The TSP exists because hundreds of individuals from across the industry volunteer their expertise and time throughout the year to write standards that increase safety, solve problems, and make life easier. These awards are particularly meaningful to the recipients because the nominations are made by their peers working with them within the Technical Standards Program.

The TSP Above & Beyond Award recipients for 2014 honored included:



Eric Johnson (Control Protocols Working Group) was nominated as a rare treasure who can present the most complex subject to a novice, without any hint of condescension, in a manner that allows comprehension. Through his involvement in the CPWG's events for manufacturers and developers to test entertainment control products for interoperability (Plugfests), we have all seen him offering valuable assistance to each and every attendee.



Richard Nix of Entertainment Structures Group (Rigging Working Group) was nominated for his tireless work for the Rigging Working Group, the E1.4-1 Manual Counterweight Rigging Task Group, and the Stage Lifts Working Group. His logical, methodical writing style has made our standards more concise, and his depth of knowledge is welcomed by all involved.



Jason Potter (Control Protocols Working Group) was cited for being instrumental in the development of the E1.33, *Transport of ANSI E1.20 messages in an E1.31 Environment*, as well as assisting in the organization of web conferences for the Control Protocols Working Group and its task groups.



Larry Schoeneman of Designlab Chicago (Technical Standards Council) was recognized for his determined efforts to secure financial support for the Technical Standards Program, which is dependent on funding from the industry to carry out its important work.

These individuals deserve the thanks not only of their colleagues in the Technical Standards Program, but of every individual whose workplace is safer or job is easier because of the work they are doing. Thank you!

“modern atmospheric effects” that are within the book's scope. It also corrects some formatting errors. The fourth edition's notation consistently squared oxygen rather than showing it as a diatomic molecule.

ANSI E1.23 – 2010 (R2015), Entertainment Technology – Design and Execution of Theatrical Fog Effects, mentioned in the last TSP News column as being in public review, has been reaffirmed and published. There was some discussion at the Fog and Smoke Working Group

meeting about promoting what the standard requires, particularly the requirement to follow the instructions provided by the fog machine manufacturer. These instructions usually specify particular fluids for use in the machine. These fluids will make fog, will not be cooked into toxic byproducts, will not damage the equipment, and will not void the machine manufacturer's warranty. The standard offers what the consensus of the industry says is good advice, what is considered responsible behavior, and

it looks like an NFPA standard, so it's a good back-up when an Authority Having Jurisdiction wants to know why you are doing what you are doing. Look for an LDI session on this standard later this year.

Followspot Position Working Group

The FPWG was formed 11 years ago to write one standard, *ANSI E1.28 – 2011, Guidance on Planning Followspot Positions*

in Places of Public Assembly, to address problems with followspot positions that were useless for stage lighting or unsafe for followspot operators. It took seven years to write that standard. Now the working group meets regularly once a year at the USITT Conference to consider if the standard needs to be revised or reaffirmed. On March 20, the working group decided, "Not yet." The robot on the tsp.plasa.org website says the standard has been downloaded 461 times since the sponsorship of ProSight Specialty Insurance made the downloads free two years ago. In addition, we've sold six copies! So far, no one has demanded his click or money back, so any defects must not be egregious, but we'll see what the working group says at next year's USITT Conference.

Photometrics Working Group

The working group met on March 20 to consider its two active projects: BSR E1.54,

PLASA Standard for Color Communication in Entertainment Lighting, and BSR E1.55, Standard for Theatrical Makeup Mirror Lighting. The first of these specifies a standardized color space, and defines the locations of the RGB primaries and the White Point for the purpose of facilitating the communications between lighting controllers and color-changing luminaires. It was offered for public review, and no one commented, perhaps because the draft document had already been informally circulated within the industry before the review. With no comments to resolve, the document is ready for adoption, and the working group is in the process of voting to do that by letter ballot.

E1.55 received public review comments. The working group considered them, made changes to the draft standard, and voted to offer it for another public review. The TSC is now considering that public review motion. The only rational basis for rejecting the review motion would be that the

comments had not been addressed, but they were, so look for another public review, perhaps about the time you are reading this. This is another standard being developed to address a concern of Actors' Equity, whose members occasionally have problems with makeup mirror lighting.

Rigging Working Group

The RWG had 72 members attending its meeting on March 19, and heard reports or discussed nine projects. Of them, BSR E1.47, Recommended Guidelines for Entertainment Rigging Inspections, was the one that was moved forward, with a vote to accept resolutions to the last public review and to offer a revised version of the standard for another review, since it has been substantively changed. The public review motion is now being considered by the TSC. The standard is being written to offer what the title says: Guidelines for rigging

engineering the entertainment industry

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Call for members

PLASA's TSP works to maintain a balance of interest on the working groups to help ensure that the standards developed are for the benefit of everyone: the people who make equipment, the people who sell or rent it, the people who specify it, and the people who use it. To do this, periodically the TSP issues a call for new members in particular interest categories. At this time, the following working groups are looking for voting members in the noted interest categories to help balance the interests in the working group.

Control Protocols: dealer/rental companies, designers

Electrical Power: dealer/rental companies, designers

Floors: dealer/rental companies, designers

Fog and Smoke: dealer/rental companies, designers, general interest

Photometrics: dealer/rental companies, designers, users

Rigging: designers

Stage Lifts: users, general interest

Voters in PLASA's Technical Standards Program are required to attend meetings and to vote on letter ballots. Membership in PLASA is not a requirement for participation in the PLASA Technical Standards Program. More information about becoming involved in the Technical Standards Program is available at http://tsp.plasa.org/tsp/working_groups/index.html.

inspections to inform owners, users, and inspectors about the process of inspecting entertainment rigging systems. The purpose of the inspection is to provide information about the condition of systems and components at the time of the inspection. The need for inspections is one of those topics that generates phone calls to me from schools with theatres. Do they really need to have the rigging inspected annually? Well, would they rather wait until the system rains parts to decide to do something?

Stage Lifts Working Group

The SLWG was formed about five years ago to develop one standard: E1.42, Entertainment Technology — Safety Standard for Orchestra Pit Lifts. The project is to address the problem of inconsistent or non-existent inspection and approval processes for orchestra pit lifts. The draft standard was offered for public review twice,

but the working group lost energy resolving the last review's comments and failed to meet for a year. The effort has been revived, however, and the working group met on March 18 with new leaders, Dan Culhane of SECOA and Richard Nix of Entertainment Structures Group. Public review comments were discussed, some resolutions drafted, and more detailed writing jobs delegated to smaller task groups.

The working group had been meeting monthly by WebEx, but that proved exhausting. It will continue to meet frequently by WebEx, and occasionally in face-to-face meetings, but with a somewhat less ambitious schedule. Frequent meetings are essential for making progress—ANSI's standard suggestion for moving faster is to meet more frequently—but developing standards takes time: time to do, time to read, time to write, time to think, time to talk, time to listen, and time to calm down. It's like growing wheat. The wheat will emerge, given sun, water, and soil, in its own time. It will not be rushed.

Investors in Innovation

The Technical Standards Program is supported by companies and individuals who make undirected donations. That is,

the donations go to support the Technical Standards Program in general, and not any particular working group or any particular standard or project. If you would like to help support the Technical Standards Program in its work, please consider joining the Investors in Innovation. Information about becoming an Investor in Innovation is available at <http://tsp.plasa.org/invest>.

Since April 15, 2013, all of the standards published by PLASA's Technical Standards Program are available to download free of charge at <http://www.tsp.plasa.org/freestandards>, thanks to the sponsorship of ProSight Specialty Insurance. As of April 8, 2015, there has been 31,759 standards downloaded, with a total retail value of \$967,355, by 5,656 users. The sponsorship has been invaluable in making PLASA's standards part of the way the entertainment industry does business and talks about our industry with other standards organizations and government. ■



Karl G. Ruling is PLASA's Technical Standards Manager. He also serves as *Protocol's* Senior Technical Editor. He can be reached at karl.ruling@plasa.org.

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The Technical Standards Program is at the forefront of our industry's effort to create the common standards needed for businesses to become more productive and profitable, and to ensure the safety of audiences and the many people who make their livelihoods in our industry.

Investing in the Technical Standards Program is investing in the present and the future of the entertainment technology industry. Whether you are concerned with safety in the workplace or issues of equipment compatibility, you can have an impact by becoming an investor today. The TSP is made possible entirely through sponsorships.

We hope you will consider becoming an Investor in Innovation. Your foresight and financial support will allow PLASA to continue to develop the leading standards-making program serving the world-wide entertainment technology industry. You may make a donation online at http://tsp.plasa.org/tsp/inv_in_innovation/sponsor.html or by contacting Lori Rubinstein at 212-244-1505 ext. 702 or lori.rubinstein@plasa.org.