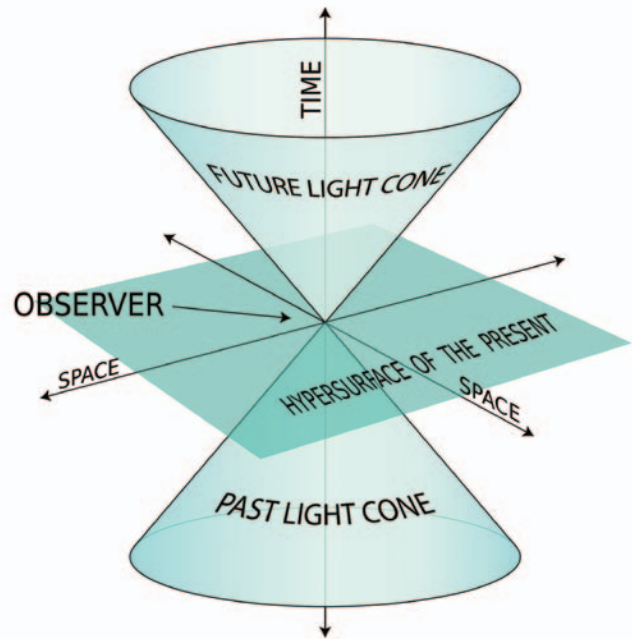


Uji

I'm on the ESTA meeting schedule page: <https://www.esta.org/ESTA/meetings.php>. Looking for the next Photometrics Working group time/date, and I see it is 3:00 – 5:00 p.m. on July 27. What time zone is that? Would you please add time zone to the schedule?

MEETINGS ARE EMBEDDED IN TIME, but everything is embedded in time, exists inseparably with time, including standards. My college physics book, *Physics for Poets*, in a chapter dealing with Einstein's special theory of relativity, says "The point is that the existence of an object . . . can only be described in a four-dimensional realm called space-time." Eihei Dōgen wrote pretty much the same thing in the 13th century in the "Uji" chapter of *The Shōbōgenzō*. After eight verses of Yaoshan giving instructions on things to do "for the time being," Dōgen wrote, "For the time being here means time itself is being, and all being is time."¹

Things must exist in the same here and now in which we are aware or we can't perceive them, but also the meaning or importance of things depends on time. I'm writing this because we've had a dozen documents approved as American National Standards by ANSI's Board of Standards Review since the last installment of TSP News; seven of them are reaffirmations. It's easy to dismiss the importance of a reaffirmation because a reaffirmed standard has no new material in it. If you have a product or procedure that draws on a standard that has been reaffirmed, you don't have to change anything. Easy!—but it's still important to note that it's easy for *now*. Standards tell you what you should or must do or think about, how something should or must be, but, more importantly, standards are the consensus of the industry at a particular time. If a standard is reaffirmed, the consensus is that it still is appropriate for now (and we'll look at it again in five years or sooner if someone says there's a problem). If it's not appropriate for now, the reaffirmation motion fails, and we change the project into a revision. That triggers more work and more public reviews, but it's how we make sure that standards are relevant for our time.



Everything exists in a four-dimensional space-time, which only can be suggested on a two-dimensional page—although that page also exists in space-time. Look now before it's gone!

Reaffirmed standards

ANSI E1.3 – 2001 (R2021), *Entertainment Technology – Lighting Control Systems – 0 to 10 V Analog Control Specification*, describes a method of controlling equipment by means of an analog control voltage. It is primarily intended for lighting control equipment (controllers and dimmers), but it could be used for almost anything. Note that in this standard the controller sources the current and the controlled devices sink it. Many "0 to 10 V" devices in the architectural market have the sources and sinks swapped: The controlled devices provide the control signal current. This standard is important for distinguishing the control method used in the entertainment industry from that used in some architectural applications.

ANSI E1.15 – 2006 (R2021), *Entertainment Technology – Recommended Practices and Guidelines for the Assembly and Use of Theatrical Boom and Base Assemblies*, is a reaffirmation of the 2006 standard. It gives advice on boom and base assemblies, simple ground-support devices for lighting equipment and accessories. There's no new technology to keep a boom from toppling, but a toppling boom can make people be old-fashioned dead. This document offers advice to lower or eliminate that risk, and removes the "Oh, who knew?" excuse.

ANSI E1.27-1 – 2006 (R2021), *Entertainment Technology – Standard for Portable Control Cables for Use with ANSI E1.11 (DMX512-A) and USITT DMX512/1990 Products*, is a

reaffirmation of the prior version. It specifies cable marking and the connectors to use on a cable. Members of the Control Protocols Working Group argued a lot in the early part of this century about one data pair versus two, and finally reached a compromise that doesn't mandate a secondary pair that is rarely used but helps avoid hours of frustration when single-pair cable is used on products needing double-pair.

ANSI E1.28 – 2011 (R2021), *Guidance on Planning Followspot Positions in Places of Public Assembly*, offers guidance on the planning of permanent followspot positions, including recommendations on the locations of the followspot positions within the venue, the power likely to be needed, the waste heat generated, the amount of space likely to be needed, and the fall protection and egress issues to be considered for the followspot operator's safety.

ANSI E1.30-4 – 2010 (R2021), *EPI 26. Device Description Language (DDL) Extensions for DMX512 and E1.31 Devices*, defines protocol-specific extensions to Device Description Language for describing DMX512 devices.

ANSI E1.30-1 – 2010 (R2021), *EPI 23. Device Identification Subdevice*, specifies a collection of properties which may be exposed by a DMP device to provide detailed information on the manufacturer, model, serial number, hardware and software revisions, and other administrative details of the device.

ANSI E1.57 – 2016 (R2021), *Recommendations to Prevent Falls On or Off Movable Parade Floats, Movable Stages, and Similar Moving Platforms*, does what the title says! It was developed from procedures used in Disney parks to prevent falls by anyone (e.g., performers, technicians, politicians) on parade floats; having the procedures published as an American National Standard makes them available to *everyone*.

Revised and new standards

ANSI E1.2 – 2021, *Entertainment Technology – Design, Manufacture, and Use of Aluminum Trusses and Towers*, is about what the title says. The first edition was published 21 years ago, but it has been regularly revised as new issues with the safe use of trusses and towers have arisen.

ANSI E1.4-2 – 2021, *Entertainment Technology – Statically Suspended Rigging Systems*, is a new standard for dead-hung rigging installations. This topic often triggers calls to the TSP staff, since dead-hung battens are often found on high-school stages, sometimes supported with jack chain. Calling out bent-link chain on a rigging inspection report often generates a “So what's wrong with that?” response from the client, and then the inspector calls ESTA staff for our free advice. **ANSI E1.4-2** should shorten those discussions.

ANSI ES1.7 – 2021, *Event Safety – Weather Preparedness*, covers the consideration, development, and use of event planning

strategies that mitigate weather-related risks associated with live public events, and with their associated temporary special event structures. “Preparedness” is the key word here. It's about planning for bad weather, setting up ways to spot the bad weather in time to take appropriate action, and deciding what that appropriate action should be before any particular hazardous situation arises.

ANSI E1.39 – 2021, *Entertainment Technology – Selection and Use of Personal Fall Arrest Systems on Portable Structures Used in the Entertainment Industry*, was written for fall arrest systems attached to portable structures. It gets revised regularly because it references fall protection standards and codes written by others, and those documents are revised regularly.

ANSI E1.67 – 2021, *Entertainment Technology – Design, Inspection, Maintenance, Selection, and Use of Hand and Lever-Operated Chain Hoists in the Entertainment Industry*, is a new standard. Hand-operated hoists handle light loads well and can be used while you're waiting for the electrician or someone like him.

In public review

The following documents are in public review now at <http://estalink.us/pr>, but certainly won't be by the time this story is published. However, the page is sure not to be blank for long.

BSR E1.4-1, *Entertainment Technology – Manual Counterweight Rigging Systems*, is a revision of the 2016 edition of the manual counterweight rigging standard. The revision includes

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, designers, dealer/rental companies—not manufacturers.
- **Electrical Power:** Designers, general interest, anybody but users.
- **Event Safety:** Equipment providers, performing artists, insurance companies, event workers—not general interest.
- **Floors:** Custom-market producers, dealer/rental companies, designers.
- **Fog and Smoke:** Mass-market fog machine manufacturers and dealer/rental companies in particular, but anybody other than users.
- **Followspot Position:** Producers of any type, dealer/rental companies.
- **Photometrics:** Dealer/rental companies, designers, general interest.
- **Rigging:** Designers.
- **Stage Machinery:** 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 <http://estalink.us/evt6b>. Check them out—and see if any of the working groups fit your interests and expertise.

changes made to enhance clarity, and to update the requirements to current recommended practices and technology. Wire-guided arbor systems are no longer included in this *E1.4-1*.

BSR ES1.4, Event Safety – Fire Safety Requirements, applies to fire safety specifically in the live event industry. Fire safety is the identification and assessment of event specific fire risks, and the effects that fire and smoke will have to the life safety of all persons who may be affected. It includes those measures required to minimize the likelihood of a fire starting, means of escape, fire safety monitoring, and the methods used to limit the development, spread, and effects of fire.

BSR ES1.6, Event Safety – Communications, applies to communications in the live event industry and describes requirements for internal communication and public information for live events and related activities. It provides guidelines and good practices for effective communication within the production and operation of a live event.

BSR E1.20, Entertainment Technology – RDM – Remote Device Management Over DMX512 Networks, is a revision to the existing 2010 edition. It’s being revised to clarify ambiguities, fix bugs, and incorporate additional features. *E1.20* is an extension to USITT DMX512 and *ANSI E1.11* that allows for bi-directional communication on the primary data link.

BSR E1.37-5, General Purpose Messages for ANSI E1.20, RDM, provides additional Get/Set parameter messages (PIDs) for use with the *ANSI E1.20 Remote Device Management* protocol.

BSR E1.40, Recommendations for the Planning of Theatrical Dust Effects, gives guidance on planning theatrical dust effects to avoid injury from dust inhalation and from fire and deflagration. The working group proposes to reaffirm the existing standard. There’s nothing new in dust, so far.

New projects

More to come!! At the April working group meetings, a couple of new projects were started. If either of these pique your interest and you want to get involved, you can do this by commenting during future public reviews, or by joining the relevant working group to help write the standard. Information about joining a working group is in the accompanying “Call for Members” sidebar.

BSR E1.59, Object Transform Protocol, is a Control Protocols Working Group project to revise *ANSI E1.59*, which was approved and published earlier this year. The standard can be used now—no problems—but people want to add support for camera modules (including lens metadata).

BSR E1.74, Guidance on Ventilation for Indoor Stages and Motion Picture Studios, is a Fog and Smoke Working Group project to address ventilation for health and for atmospheric effect management. There are lots of existing standards for the ventilation of indoor spaces, but a lot of them are applied assuming that a

building functions as built—end of story. Stages and studios are dynamic spaces, used in different ways at different times; this standard would help people understand what ventilation standards would need to be used when, and what modifications might be needed for particular productions.

The way-back machine

I’ve given you lists of newly published documents, documents in public review, and new projects, but if you really want to know what ESTA’s working groups have been up to, you can read their approved minutes, posted under the “Meetings and Minutes” tab for each of the working groups at <https://tsp.esta.org/>. The oldest go back to March 1996. Maybe you’ll want to join! ■



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Endnote:

1 *Treasury of the True Dharma Eye: Zen Master Dogen’s Shobo Genzo*, edited by Kazuaki Tanahashi. Boston: Shambhala Publications, Inc., 2010. 104.

ESTA's TSP 2020 recipients of the annual Above & Beyond Awards



Ethan Gilson
Rigging Working Group

Wayne Howell
Control Protocols Working Group

Reid Neslage
Rigging Working Group

ESTA Announces the Technical Standards Program's Above & Beyond Award Recipients.

The TSP exists because hundreds of individuals from across the industry volunteer their expertise and significant amounts of time to write and improve standards that increase safety, provide interoperability between different manufacturers, solve problems, and make life easier. The awards are a chance for volunteers to celebrate those of their peers whom they feel have made a significant contribution to the advancement of the program.

The 2020 Above & Beyond Awards were presented to:

Ethan Gilson, Entertainment Rigging Services, LLC (Rigging Working Group). Ethan was praised for his expert knowledge of rigging and his unique approach to both analyzing rigging challenges and coming up with their answers. His method of evaluating the relevance of a subject and converting it into an ANSI accredited rigging standard is extraordinary. Ethan's enthusiasm about the TSP has also inspired many people to volunteer, which has helped the program flourish.

Wayne Howell, Artistic Licence (Control Protocols Working Group). A long-time consistent contributor to the CPWG, Wayne was lauded for being a task group leader on the *E1.20 Remote Device Management (RDM)* revision project. Working late hours across international time zones, Wayne has demonstrated exceptional

leadership in guiding the task group and has exhibited an admirable determination to make certain that every voice is heard without bias with the goal of consensus in mind.

Reid Neslage, H&H Specialties (Rigging Working Group). Reid was commended for the vast knowledge and wealth of experience he brought to the TSP. Further, he was applauded for being one of the "true gentlemen" in our industry because his immense dedication to the program was borne purely from passion, without agenda.

ESTA's Technical Standards Program is the only ANSI-accredited standards program dedicated to the needs of the entertainment technology industry. The standards created under the TSP are used directly or indirectly every day by almost every manufacturer, dealer, installer, production company, and end user.

The TSP is comprised of over 350 volunteer experts who devote time and knowledge to drafting American National Standards for the benefit of the whole entertainment technology industry. The TSP is always interested in any new member who wishes to join the group (information at <http://tsp.esta.org/getinvolved>). Organizers are particularly interested in recruiting new members from dealer/rental companies and the lighting design community.

For more information on this award, please visit <https://tsp.esta.org/aboveandbeyond>.