

Minutes
Rigging Working Group
Thursday, 9 March 2017
St. Louis Marriott Grand
800 Washington Ave., St. Louis, MO 63101

Presiding co-chairpersons:

Christine L. Kaiser; Syracuse Scenery & Stage Lighting Co., Inc.; P; DR
Bill Sapsis; Sapsis Rigging, Inc.; P; U

Recording secretaries: Erin Grabe and Karl Ruling; ESTA

Members in attendance:

Jacob Abbott; PSAV Presentation Services; P; U
Mike Adamovich; McLaren Engineering Group; M.G. McLaren, P.C.; A; G
Jesse Adams; Rose Brand; P; DR
Frank Allison; McLaren Engineering Group; M.G. McLaren, P.C.; A; G
Dana Bartholomew; Flying by Foy; Foy Invenenterprises, Inc.; P; CP
William Beautyman; Limelight Productions, Inc.; P; DR
William Bradburn; Aerial Arts, Inc.; P; U
Bennett Brian; Reed Rigging Inc.; P; DR
Joseph Champelli; Entertainment Project Services, LLC; P; DE
Dan Culhane; J.R. Clancy, Inc.; Wenger Corp.; A; CP
Bruce Darden; InterAmerica Stage, Inc.; P; CP
David Darland; PSAV Presentation Services; O; U
Jonathan Deull; JSD Projects LLC; I; U
Brad Dittmer; Stage Labor of the Ozarks; P; U
Russ Dusek; I Weiss; P; MP
Don Earl; Earl Girls, Inc.; P; DR
Nick Fleming; Walt Disney Parks and Resorts U.S.; Walt Disney Company; A; U
Mike Garl; Mike Garl Consulting LLC; P; DE
Dan Gibbs; Crew One Productions; P; U
Ethan William Gilson; ALPS; Advanced Lighting and Production Services; P; U
Sanford P. Gilzow; Shur-Rig LLC; P; G
William B. Gorlin; McLaren Engineering Group; M.G. McLaren, P.C.; P; G
Jerry Gorrell; Theatre Safety Programs; P; G
Pat Grenfell; Hoist Sales & Service; P; DR
Rod Haney; I.A.T.S.E. Local 891; P; U
Tim Hansen; Oasis Stage Werks; P; DR
Herb Hart; Columbus McKinnon Corp.; A; MP
Jeremy Hodgson; Cirque Du Soleil, Inc.; P; U
Donald Hoffend_III; Avista Designs, LLC; P; G
Joseph Jeremy; Niscon Inc.; Show Distribution Group, Inc.; P; MP
Ted Jones; Art Drapery Studios; Grand Stage; P; U
Jerald Kraft; JTH Lighting Alliance; P; CP
Edwin S. Kramer; I.A.T.S.E. Local 1; P; U
Kyle Kusmer; Entertainment Structures Group; Steven Schaefer Associates; P; G
Roger Lattin; I.A.T.S.E. Local 728; P; U
Jon Lenard; Applied Electronics; A; MP
Michael Lichter; Electronic Theatre Controls, Inc. (DE); Electronic Theatre Controls, Inc.; A; MP
Dan Lisowski; Dept. Of Theatre and Drama; University of Wisconsin - Madison; P; U
Daniel H. Louis; Theta Consulting LLC; P; G
Joseph McGeough; Flying by Foy; Foy Invenenterprises, Inc.; A; CP
Sam Michael; Thern, Inc.; P; MP
Orestes Mihaly; Production Resource Group; P; DR

Bartholomew J. Mueller; Recreation Engineering Inc.; P; DE
Reid Neslage; H & H Specialties Inc.; P; MP
Richard J. Nix; I; G
Shawn Nolan; Production Resource Group; A; DR
Tracy Nunnally; Vertigo; P; CP
Carlos Ortega; PSAV Presentation Services; P; U
Miriam Paschetto; Geiger Engineers; P; G
Rocky Paulson; Stage Rigging, Inc.; Freeman Companies; A; DR
Ty M. Prewitt; BellaTEX, Inc.; P; MP
Steven Ricks; Electronic Theatre Controls, Inc.; P; MP
John Ringelman; Stage Rigging, Inc.; Freeman Companies; P; DR
Eric Rouse; Chicago Flyhouse; P; CP
Tim Salamon; PSAV Presentation Services; O; DR
Peter A. Scheu; Scheu Consulting Services, Inc.; O; DE
Chris Schmidt; Stage Rigging, Inc.; Freeman Companies; A; DR
Jason Schumacher; ZFX Flying Inc.; A; DE
Steven Serafin; Chubb Group of Insurance Companies; P; G
John C. Snook; Thermotex Industries Inc.; P; CP
Peter V. Svitavsky; J.R. Clancy, Inc.; Wenger Corp.; P; CP
Jason Tello; Tyler Truss Systems; P; CP
Elmer Veith; Total Structures - Eastern US Sales Office; Total Structures, Inc.; A; MP
Steve Walker; Steve A. Walker & Associates; P; G
Patrick Wallace; PSAV Presentation Services; O; U
Charlie Weiner; Tomcat USA, Inc.; Milos Group; A; MP
Jeff Wilkowski; Thern, Inc.; A; MP
Greg Williams; PSAV Presentation Services; O; G
R. Duane Wilson; George C. Izenour Associates; Amer. Society of Theatre Consultants; P; DE
Stephan Jon Wood; Stage Technologies; Tait Towers Manufacturing LLC; P; CP
Paul Zagajeski; J.R. Clancy, Inc.; Wenger Corp.; A; CP

Visitors:

Tim Moran; Tomcat/JTE
Scott Johnson; Tomcat/JTE
Jeff Wilson; Bento Productions
Megan Masching; Bento Productions
Jonathan Berry; Mountain Productions
Amanda Zimmerman; Bellatex, Inc.
Lynn Snook; Thermotex Ind.
Zachary Stevenson; UNCSA

1 Opening remarks

Bill Sapsis called the meeting to order and welcomed everyone, at 6:02 p.m. CT, to the Rigging Working Group—the hottest ticket in town. He thanked everyone for their commitment to the Technical Standards Program and for doing the good work of putting these standards together. The intent is to finish this meeting by 8pm, to allow folks to attend Rocky's Paulson award reception. Bill instructed those online to, when it's time to vote, use Chat, for Yes, No, or Abstain.

2 Attendance and membership

2.1 Introductions of those present and taking attendance

2.2 Call for quorum

By a count of voters' hands, Bill Sapsis declared a supermajority present.

2.3 Requirements for membership

The following statement was read aloud to the assembly by Bill Sapsis:

Membership is open to all who are materially affected by the work of the group. People who would be in the designer interest group category are particularly encouraged to join. There is an annual \$100 participation fee for all members. Voting members are required to attend meetings and to vote on letter ballots. Any principal member and voting alternate who both miss three consecutive meetings or letter ballots will have their membership status changed to observer.

2.4 Changes of membership status due to lack of attendance

The following voters were not present, thus missing the last three meetings, and were moved to Observer status due to lack of attendance:

Matthew Antonucci; Contract Services Administration Trust Fund; P; U
 Kimberly Corbett Oates; Schuler Shook; P; DE
 Bob McVay; Schuler Shook; A; DE

2.5 Processing of new membership and change in status requests:

As of 9 March 2017, the following applications or change requests have been received:

Jacob Abbott; PSAV Presentation Services; O; U
 Jason Tello; Tyler Truss Systems; P; CP
 Eric Rouse; Chicago Flyhouse; P; CP
 Brad Dittmer; O to P
 Trip Hoffend; O to P
 Jason Schumacher; ZFX; A; DE
 Dan Gibbs; Crew One Productions; P; U
 Jeong Sik Yoo; Korea Testing Laboratory / Theatre Safety Center; O

Eddie Kramer moved to approve the new applications and requests for status change. The motion was seconded and approved by a unanimous show of hands and WebEx chat.

2.6 Consensus body

The full consensus body of this group at the time of this meeting, including those not present, was:

Name	Representing	Voting status	Int cat
Ethan William Gilson	Advanced Lighting and Production Services	P	U
William Bradburn	Aerial Arts, Inc.	P	U
R. Duane Wilson	Amer. Society of Theatre Consultants	P	DE
Max A. Wilson	Applied Electronics	P	MP
Jon Lenard	Applied Electronics	A	MP
Donald Hoffend_III	Avista Designs, LLC	P	G
Ty M. Prewitt	BellaTEX, Inc.	P	MP
Eric Rouse	Chicago Flyhouse	P	CP
Steven Serafin	Chubb Group of Insurance Companies	P	G
Jeremy Hodgson	Cirque Du Soleil, Inc.	P	U
Tom Lapp	Cirque Du Soleil, Inc.	A	U
Ken Tilson	Columbus McKinnon Corp.	P	MP
Herb Hart	Columbus McKinnon Corp.	A	MP
Dan Gibbs	Crew One Productions	P	U
Don Earl	Earl Girls, Inc.	P	DR
Steven Ricks	Electronic Theatre Controls, Inc.	P	MP
Michael Lichter	Electronic Theatre Controls, Inc.	A	MP

Name	Representing	Voting status	Int cat
Joseph Champelli	Entertainment Project Services, LLC	P	DE
Steven Michelman	Entertainment Project Services, LLC	A	DE
Dana Bartholomew	Foy Invenerprises, Inc.	P	CP
Joseph McGeough	Foy Invenerprises, Inc.	A	CP
John Ringelman	Freeman Companies	P	DR
Rocky Paulson	Freeman Companies	A	DR
Chris Schmidt	Freeman Companies	A	DR
Theresa Kelley	Full Throttle Films/ VER	P	DR
Miriam Paschetto	Geiger Engineers	P	G
Ted Jones	Grand Stage	P	U
Reid Neslage	H & H Specialties Inc.	P	MP
Pat Grenfell	Hoist Sales & Service	P	DR
Edwin S. Kramer	I.A.T.S.E. Local 1	P	U
Roger Lattin	I.A.T.S.E. Local 728	P	U
Rod Haney	I.A.T.S.E. Local 891	P	U
Russ Dusek	I Weiss	P	MP
Bruce Darden	InterAmerica Stage, Inc.	P	CP
Jonathan Deull	JSD Projects LLC	I	U
Jerald Kraft	JTH Lighting Alliance	P	CP
Keith Bohn	Keith Bohn	I	G
William Beautyman	Limelight Productions, Inc.	P	DR
William B. Gorlin	M.G. McLaren, P.C.	P	G
Frank Allison	M.G. McLaren, P.C.	A	G
Mike Adamovich	M.G. McLaren, P.C.	A	G
Mike Garl	Mike Garl Consulting LLC	P	DE
Will Todd	Milos Group	P	MP
Charlie Weiner	Milos Group	A	MP
Marty Wesstrom	Mountain Productions Inc.	P	DR
Jacob E. Loretto	Musson Theatrical Inc.	P	DR
Tim Hansen	Oasis Stage Werks	P	DR
Pete Happe	Pete Happe	I	G
Orestes Mihaly	Production Resource Group	P	DR
Shawn Nolan	Production Resource Group	A	DR
Carlos Ortega	PSAV Presentation Services	P	U
Demian Purdy	PSAV Presentation Services	A	U
Tracie Allen	R&M Materials Handling	P	MP
Bartholomew J. Mueller	Recreation Engineering Inc.	P	DE

Name	Representing	Voting status	Int cat
Bennett Brian	Reed Rigging Inc.	P	DR
Richard J. Nix	Richard J. Nix	I	G
Jesse Adams	Rose Brand	P	DR
Bill Sapsis	Sapsis Rigging, Inc.	P	U
Joseph Jeremy	Show Distribution Group, Inc.	P	MP
Sanford P. Gilzow	Shur-Rig LLC	P	G
Joseph S. Schuster	Simpson Gumpertz & Heger	P	DE
Brad Dittmer	Stage Labor of the Ozarks	P	U
Steve Walker	Steve A. Walker & Associates	P	G
Kyle Kusmer	Steven Schaefer Associates	P	G
Christine L. Kaiser	Syracuse Scenery & Stage Lighting Co., Inc.	P	DR
Harold Ike Shippers	Syracuse Scenery & Stage Lighting Co., Inc.	A	DR
Stephan Jon Wood	Tait Towers Manufacturing LLC	P	CP
Stephen G. Surratt	Texas Scenic Company	P	DR
Russell Solomon	Texas Scenic Company	A	DR
Jim Niesel	Theatre Projects Consultants, Inc.	P	DE
Jerry Gorrell	Theatre Safety Programs	P	G
John C. Snook	Thermotex Industries Inc.	P	CP
Sam Michael	Thern, Inc.	P	MP
Jeff Wilkowski	Thern, Inc.	A	MP
Daniel H. Louis	Theta Consulting LLC	P	G
Adrian Forbes-Black	Total Structures Inc.	P	MP
Elmer Veith	Total Structures, Inc.	A	MP
Jason Tello	Tyler Truss Systems	P	CP
Dan Lisowski	University of Wisconsin - Madison	P	U
Tracy Nunnally	Vertigo	P	CP
John P. Moore	Vertigo	A	CP
Ian Bevan	Walt Disney Company	P	U
Nick Fleming	Walt Disney Company	A	U
Peter V. Svitavsky	Wenger Corp.	P	CP
Dan Culhane	Wenger Corp.	A	CP
Paul Zagajeski	Wenger Corp.	A	CP
Gregory Orth	WNP Services, Inc.	P	DR
Michael Wells	Xtreme Structures and Fabrication	P	MP
Mark Newlin	Xtreme Structures and Fabrication	A	MP
Robert Dean	ZFX, Inc.	P	G
Jason Schumacher	ZFX Flying Inc.	A	G

Voting Status Key: P = Principal voter, A = Alternate voter, I = Individual voter		
Votes by Interest Category:		
Custom-market producer	CP	9
Designer	DE	6
Dealer or rental company	DR	14
General interest	G	13
Mass-market producer	MP	12
User	U	14
Total votes possible:		68

3 Approval of minutes from the previous meeting

See the draft minutes of the January meeting, *RIGmin01-2017.pdf*.

Dan Culhane moved to approve the minutes as drafted. The motion was seconded. Bill Bradburn pointed out that for Item 6.18, his vote was an abstention. Dan Culhane changed the motion to approve the minutes as amended. That motion was seconded and approved with one abstention.

4 ESTA declarations

4.1 Reading of the anti-trust statement

The following statement was read aloud to the assembly by Bill Sapsis:

ESTA and its members take seriously their obligation to comply with all applicable antitrust laws. Therefore, during this meeting and during all ESTA events, all discussions will be limited to those subjects that are permitted by the antitrust laws. All members should refrain from any discussion or mention of competitively sensitive subjects such as the current or future prices charged for any member product or services, current or future marketing plans or strategies, and current or future costs, including employee salaries. There also must be no agreement on the suppliers or customers that members will do business with or the markets in which members will conduct business.

Violations of the antitrust laws can have serious consequences. If you have any questions or concerns about anything that is discussed at an ESTA meeting, please bring your concern to ESTA management. An easy to read pamphlet describing the antitrust laws is available from the ESTA staff.

Erin Grabe and Karl Ruling held up copies of the pamphlets. Nothing was reported.

4.2 Reading of the call for patents

The following statement was read aloud to the assembly by Bill Sapsis:

ESTA intends not to publish any standard that contains protected intellectual property, unless that information can be licensed by anyone for a reasonable fee. ESTA uses a process of open patent and copyright disclosures to implement its intent. ESTA does not conduct patent or copyright searches and does not warrant that its standards contain no protected intellectual property.

In keeping with the open disclosures policy, I ask if anyone present wishes to notify this working group of the existence of a patent, patent application, copyright, or other intellectual property that might protect material in a standard being developed by this working group. You need not be the holder of the patent or copyright to notify this working group of its existence.

Nothing was revealed.

5 Approval of the agenda

Pat Grenfell moved to approve the agenda as drafted. The motion was seconded and approved with a unanimous show of hands and WebEx chats.

6 Old business

6.1 BSR E1.1 – 2012 (R201x), wire rope ladders (reaffirmation sought before 19 June 2017)

This standard is being considered for reaffirmation. It is in letter ballot and public review through 3 April 2017.

Karl Ruling noted the current results, including a Yes with comments. An interim summary will be distributed, and voters will be allowed to change their votes in light of them, if they wish.

6.2 ANSI E1.2 - 2012, Entertainment Technology - Design, Manufacture and Use of Aluminum Trusses and Towers (revision, reaffirmation, or withdrawal by 15 January 2018)

From the draft January minutes:

The group discussed reaffirming this standard. Elmer Veith noted that he thinks this standard needs some revision but that the group should hold off until LDI to take action. There was no disagreement, but there was no motion offered.

Elmer Veith said that the task group is still waiting and that he stands by the opinion he expressed at the last meeting. There's a lot of other work to do before work can be done on this document.

6.3 ANSI E1.4-1 - 2016, Entertainment Technology--Manual Counterweight Rigging Systems (Revise, reaffirm, or withdrawal by 11 October 2021)

No news or action at this time.

6.4 BSR E1.4-2 - 201x, Entertainment Technology—Statically Suspended Rigging Systems

From the draft January minutes:

Jesse Adams said he hoped the task group would have a draft for the working group to consider for March, with the intent of sending it for a first public review. The task group is going to push hard to have a meeting in the next week and divide up tasks to get the draft done and distributed.

Ethan Gilson spoke to the few internal comments that were sent to the task group. Ethan Gilson moved to offer the draft for public review and take the internal comments as public review comments. The motion was seconded, but failed by a show of hands and WebEx chat. Bruce Darden moved to offer the document for public review via letter ballot after the internal comments and clerical errors have been corrected. Karl Ruling noted that since this is a 1st public review, the TSC will also need to vote via letter ballot. The motion carried with one abstention. A letter ballot will be issued to the TSC, when the document is submitted to TSP staff.

6.5 BSR E1.4-3 - 201x, Entertainment Technology - Manually Operated Hoist Rigging Systems

From the October minutes:

The public review closed on 26 September 2016. Comments were received and need to be resolved.

From the draft January minutes:

The [task] group is about 2/3rds of the way through comment resolutions. The intent is to have something to the working group for consideration before March.

Richard Nix sent draft resolutions and a revised draft standard in just today [9 March]. Richard Nix moved to offer the draft resolutions for acceptance by the working group via letter ballot. The motion was seconded and approved by show of hands and WebEx chat. A letter ballot will be issued to approve the comment resolutions.

6.6 BSR E1.6-1 - 201x, Entertainment Technology--Powered Hoist Systems (last published in 2012--revision, reaffirmation, or withdrawal by 20xx)

From the draft January minutes:

The task group feels that they are close to offering the document for public review. They hope for consideration in March, but more likely July.

Bruce Darden would like to send something for consideration by Easter [roughly five weeks from 9 March].

6.7 BSR E1.6-2 - 20xx, Entertainment Technology--Design, Inspection, and Maintenance of Electric Chain Hoists for the Entertainment Industry (last published in 2013 - revision, reaffirmation, or withdrawal by 20xx)

From the draft January minutes:

Elmer Veith noted that the task group is meeting tomorrow morning [21 January] to finish the scope document for distribution. The hope is to have a draft by LDI 2017 for informal working group internal comments, with January 2018 as a goal for first public review.

Elmer Veith reported on two productive meetings. The task group should have another version for informal review within two weeks, and ask that a deadline of the end of April be set for submitting internal comments.

6.8 ANSI E1.6-3 - 2012, The Use of Electric Chain Hoists in the Entertainment Industry (revision, reaffirmation, or withdrawal by 3 July 2017)

From the draft January minutes:

Bill Sapsis asked that the working group look at this document over the next several weeks in order to make a recommendation in March to revise, reaffirm, or withdraw this document.

Elmer Veith moved to reopen the standard for revision. The motion was seconded and approved with two abstentions.

Bill Sapsis appointed John Ringleman, Dan Lisowski, Herb Hart; Ben Brian, Pat Grenfell, Nick Fleming, Charlie Weiner, Rod Haney, and Elmer Veith (Chair) to the task group. A reflector was requested.

6.9 ANSI E1.6-4 - 2013, Control of Electric Chain Hoists in the Entertainment Industry (revision, reaffirmation, or withdrawal by 3 October 2018)

Dan Lisowski moved to open the standard for revision. The motion was seconded and there was some discussion on whether to revise this now or to wait for E1.6-2 and E1.6-3 revisions to be complete. The consensus was that the suite should be revised concurrently. The motion carried by a show of hands and WebEx chat with three abstentions.

6.10 BSR E1.8 – 2012 (R201x), Entertainment Technology--Loudspeaker Enclosures Intended for Overhead Suspension--Classification, Manufacture and Structural Testing (revision, reaffirmation, or withdrawal by 15 January 2018)

Bill Sapsis noted this standard is being considered for reaffirmation. It is in letter ballot and public review through 3 April 2017.

6.11 ANSI E1.15 - 2006 (R2016), Entertainment Technology--Recommended Practices and Guidelines for the Assembly and Use of Theatrical Boom & Base Assemblies (revision, reaffirmation, or withdrawal by 23 September 2021)

No news or action at this time.

6.12 ANSI E1.21 - 2013, Entertainment Technology — Temporary Structures Used for Technical Production of Outdoor Entertainment Events (revision, reaffirmation, or withdrawal by 19 December 2018)

No news or action at this time.

6.13 ANSI E1.22 - 2016, Entertainment Technology - Fire Safety Curtain Systems (Revise, reaffirm, or withdrawal by 11 October 2021)

John Snook gave a brief presentation on fire curtain testing to ASTM E119, NFPA 80, and ANSI/ESTA E1.22. See *Snook_USITT_03-2017.pdf*.

Jerry Gorrell added that NFPA 80 will be offered for public review in the next 6-8 months, and he will let us know.

6.14 ANSI E1.39 - 2015, Entertainment Technology –Selection and Use of Personal Fall Arrest Systems on Portable Structures Used in the Entertainment Industry (Revision, reaffirmation, or withdrawal by 28 January 2020)

No news or action at this time.

6.15 ANSI E1.43 - 2016, Live performer flying effect standard (Revise, reaffirm, or withdrawal by 12 February 2021)

No news or action at this time.

6.16 ANSI E1.44 – 2014, Common Show File Exchange Format for Entertainment Industry Automation Control Systems -- Stage Machinery (revision, reaffirmation, or withdrawal by 6 February 2019)

No news or action at this time.

6.17 Rigging Glossary

No news or action at this time.

6.18 BSR E1.47 - 201x Recommended Guidelines for Entertainment Rigging System Inspections

The approved resolutions to the No votes were sent back to the members who voted No with reasons. They were given a deadline to object or to file an appeal of 3 March. If no further objections or an appeal are received, the measure will move to the TSC.

Karl Ruling noted that the TSC has approved the measure at their meeting here in St. Louis. The Executive Committee will receive a letter ballot, soon.

6.19 BSR E1.50—Video wall project

Consideration of draft comment resolutions. See E1-50_DisplaySystems_2013-2056r8.pdf and Smmry_E1-50_ScndRevw draft resolutions.pdf.

Richard Nix moved to accept comment resols and the revised document. The motion was seconded and approved by a show of hands and WebEx chat with four abstentions and the rest in favor.

Richard Nix moved to accept the revised draft standard as an American National Standard. The motion was seconded and will be decided by letter ballot to the working group.

6.20 BSR E1.56, Rigging Support Points Design, Fabrication, Installation, and Testing

Shawn Nolan said there has been excellent progress through weekly meetings and a meeting this morning. The group is 75% of the way done with the document and plan to finish within the next three weeks to send to the group before the July meetings.

6.21 BSR E1.59 – 20xx, Automation Vector Transmission Protocol

Dan Lisowski said that the group met today. The current intent is to craft a two-page white paper to generate feedback from the rest of the industry. Roger Lattin noted the deadline of the EU Plugfest.

7 New business

7.1 Rigging console protocol

From the draft January minutes:

Bruce Darden spoke to high-level rigging control (consoles), and advised that folks interested in this should get involved and propose a project.

Joe Jeremy is drafting a new project form for this group to consider.

7.2 Other new business

8 Other business and announcements

8.1 Above & Beyond Awards

Bill Sapsis noted that the site is open year round at estalink.us/aboveandbeyond. Everyone is encouraged to make nominations for the Above & Beyond Awards.

8.2 CEN standards update

Michael Lichter reported on the four working groups:

WG 1 Machinery Secretary: BSI (UK)

Convenor: R. Bonner

WG 2 Working Materials Secretary: DIN (Germany)

Convenor: M. Möller

WG 3 Terminology Secretary: tbd (possibly AFNOR, France)

Convenor: tbd

WG 4 Codes of practice Secretary: AENOR (Spain)

Convenor: P. Moreno Montes

WG-1 (machinery) just completed the first draft of their document, equivalent to ANSI-E1.6-1, "Lifting and Load-bearing Equipment for Stages and other Production Areas within the Entertainment Industry—[Part 1: General requirements (excluding aluminum and steel trusses and towers)]" The Draft is currently with CEN for editorial tweaks and should be in public review this summer.

WG-2 (working materials) completed the draft of their first document last year: "Lifting and Loadbearing Equipment for Stages and other Production Areas within the Entertainment Industry—Specifications for General requirements for aluminium and steel trusses and towers" The Draft should be in public review any time now

The group has also started work on their 2nd document: "Aluminium platforms and frames - Safety requirements and testing"

WG-3 (terminology) not started yet, France is looking into sponsoring the secretariat.

WG-4 (Codes of practice) is working on several outlines of areas in which they want to work.

If any documents go to public review, Michael Lichter will notify TSP staff to disseminate the information.

8.3 TSP funding / Investors in Innovation

Bill Sapsis noted that the campaign has been going well but more is still needed. Karl Ruling pointed out the recognition Investors in Innovation get. The current list of Investors is published in each twice-monthly issue of *Standards Watch*, it is published on the TSP website, and is published in each newly-approved standard.

8.4 Distinguished Achievement Award, USITT

Bill Sapsis noted that Rocky Paulson is to receive the Distinguished Achievement award from USITT today.

9 Schedule for future meetings

Bill Sapsis noted that the meeting schedule may be found at <http://esta.org/ESTA/meetings.php>.

9.1 July 2017 meetings

Bill Sapsis said that the July meeting is scheduled from 7-11pm on Saturday, 22 July 2017, at the D/FW Marriott Solana.

9.2 Fall meetings

Bill Sapsis said that the Autumn meetings will take place around LDI. Date, time, and location are TBD, but a likely venue is the Tropicana.

10 Adjournment

Pat Grenfell moved to adjourn. The motion was seconded. Hearing no objections, Bill Sapsis declared the meeting adjourned at 7:26 p.m. CT.

Name	Company	Representing	Voting status	Int cat
Jacob Abbott	PSAV Presentation Services	PSAV Presentation Services	O	U
Mike Adamovich	McLaren Engineering Group	M.G. McLaren, P.C.	A	G
Jesse Adams	Rose Brand	Rose Brand	P	DR
Tracie Allen	R&M Materials Handling	R&M Materials Handling	P	MP
Frank Allison	McLaren Engineering Group	M.G. McLaren, P.C.	A	G
Matthew Antonucci	Contract Services Administration Trust Fund	Contract Services Administration Trust Fund	O	U
Brent Armstrong	Alpine Rigging & Structural Design	Alpine Rigging & Structural Design	O	CP
William Ian Auld	Auld Entertainment	Auld Entertainment	O	U
Robert Barbagallo	Solotech Inc.	Solotech Inc.	O	DR
Roger Barrett	Star Events Group Ltd.	Star Events Group Ltd.	O	DR
Dana Bartholomew	Flying by Foy	Foy Inventerprises, Inc.	P	CP
William Beautyman	Limelight Productions, Inc.	Limelight Productions, Inc.	P	DR
Ian Bevan	Walt Disney Parks and Resorts	Walt Disney Company	P	U
Roy Bickel	Roy Bickel	Roy Bickel	O	G
Scott M. Blair	Full Throttle Films/ VER	Full Throttle Films/ VER	O	DR
Lee J. Bloch	Bloch Design Group, Inc.	Bloch Design Group, Inc.	O	G
Keith Bohn	Keith Bohn	Keith Bohn	I	G
William Bradburn	Aerial Arts, Inc.	Aerial Arts, Inc.	P	U
Louis Bradfield	Louis Bradfield	Louis Bradfield	O	U
Buddy Braile	North Shore Theatrical Rigging	North Shore Theatrical Rigging	O	U
Bennett Brian	Reed Rigging Inc.	Reed Rigging Inc.	P	DR
David M. Campbell	Geiger Engineers	Geiger Engineers	O	G
Joseph Champelli	Entertainment Project Services, LLC	Entertainment Project Services, LLC	P	DE
Daniel J. Clark	Clark-Reder Engineering, Inc.	Clark-Reder Engineering, Inc.	O	G
Benjamin Cohen	Chicago Flyhouse Inc.	Chicago Flyhouse Inc.	O	CP
Dan Culhane	J.R. Clancy, Inc.	Wenger Corp.	A	CP
Bruce Darden	InterAmerica Stage, Inc.	InterAmerica Stage, Inc.	P	CP
David Darland	PSAV Presentation Services	PSAV Presentation Services	O	U
Robert Dean	ZFX, Inc.	ZFX, Inc.	P	G
Jonathan Deull	JSD Projects LLC	JSD Projects LLC	I	U
Jim Digby	Event Safety Alliance	Event Safety Alliance	O	U
Brad Dittmer	Stage Labor of the Ozarks	Stage Labor of the Ozarks	P	U
Russ Dusek	I Weiss	I Weiss	P	MP
Don Earl	Earl Girls, Inc.	Earl Girls, Inc.	P	DR
Nick Fleming	Walt Disney Parks and Resorts U.S.	Walt Disney Company	A	U

Name	Company	Representing	Voting status	Int cat
Adrian Forbes-Black	Total Structures, Inc.	Total Structures Inc.	P	MP
Tim Franklin	Theta Consulting LLC	Theta Consulting LLC	O	G
Tony J. Galuppi	Tony J. Galuppi	Tony J. Galuppi	O	U
Mike Garl	Mike Garl Consulting LLC	Mike Garl Consulting LLC	P	DE
James M. Garner	Walt Disney Studios - Disney Theatrical Group	Walt Disney Company	O	G
Dan Gibbs	Crew One Productions	Crew One Productions	P	U
Ethan William Gilson	ALPS	Advanced Lighting and Production Services	P	U
Sanford P. Gilzow	Shur-Rig LLC	Shur-Rig LLC	P	G
William B. Gorlin	McLaren Engineering Group	M.G. McLaren, P.C.	P	G
Jerry Gorrell	Theatre Safety Programs	Theatre Safety Programs	P	G
Michael P. Gosenski	Rigging Systems LLC	Rigging Systems LLC	O	U
Erin Grabe	ESTA	ESTA	exf	G
Pat Grenfell	Hoist Sales & Service	Hoist Sales & Service	P	DR
Rod Haney	I.A.T.S.E. Local 891	I.A.T.S.E. Local 891	P	U
Tim Hansen	Oasis Stage Werks	Oasis Stage Werks	P	DR
Pete Happe	Pete Happe	Pete Happe	I	G
Sean Harding	Port Lighting Systems	Port Lighting Systems	O	G
Greg Hareld	Kleege Industries	Kleege Industries	O	U
Herb Hart	Columbus McKinnon Corp.	Columbus McKinnon Corp.	A	MP
Chris Higgs	Total Solutions Group	Total Solutions Group	O	G
Jeremy Hochman	Full Throttle Films/ VER	Full Throttle Films/ VER	O	DR
Jeremy Hodgson	Cirque Du Soleil, Inc.	Cirque Du Soleil, Inc.	P	U
Donald Hoffend_III	Avista Designs, LLC	Avista Designs, LLC	P	G
Joseph Jeremy	Niscon Inc.	Show Distribution Group, Inc.	P	MP
Ted Jones	Art Drapery Studios	Grand Stage	P	U
Kent H. Jorgensen	IATSE Local 80	IATSE Local 80	O	G
Gary Justesen	Oasis Stage Werks	Oasis Stage Werks	O	DR
Christine L. Kaiser	Syracuse Scenery & Stage Lighting Co., Inc.	Syracuse Scenery & Stage Lighting Co., Inc.	P	DR
Theresa Kelley	Full Throttle Films/ VER	Full Throttle Films/ VER	P	DR
Nevin Kleege	Kleege Industries	Kleege Industries	O	U
Jerald Kraft	JTH Lighting Alliance	JTH Lighting Alliance	P	CP
Edwin S. Kramer	I.A.T.S.E. Local 1	I.A.T.S.E. Local 1	P	U
Kyle Kusmer	Entertainment Structures Group	Steven Schaefer Associates	P	G

Name	Company	Representing	Voting status	Int cat
Tom Lapp	Cirque Du Soleil, Inc.	Cirque Du Soleil, Inc.	A	U
Roger Lattin	I.A.T.S.E. Local 728	I.A.T.S.E. Local 728	P	U
Jon Lenard	Applied Electronics	Applied Electronics	A	MP
Michael Lichter	Electronic Theatre Controls, Inc. (DE)	Electronic Theatre Controls, Inc.	A	MP
Dan Lisowski	Dept. Of Theatre and Drama	University of Wisconsin - Madison	P	U
Jacob E. Loretto	Musson Theatrical Inc.	Musson Theatrical Inc.	P	DR
Daniel H. Louis	Theta Consulting LLC	Theta Consulting LLC	P	G
Wendy Manson	Cirque Du Soleil, Inc.	Cirque Du Soleil, Inc.	O	U
Magali Marcheschi	Polytechnic Montreal	Polytechnic Montreal	O	G
Joseph McGeough	Flying by Foy	Foy Inventerprises, Inc.	A	CP
Bob McVay	Schuler Shook	Schuler Shook	O	DE
Sam Michael	Them, Inc.	Them, Inc.	P	MP
Steven Michelman	Entertainment Project Services, LLC	Entertainment Project Services, LLC	A	DE
Orestes Mihaly	Production Resource Group	Production Resource Group	P	DR
John P. Moore	Vertigo	Vertigo	A	CP
Bartholomew J. Mueller	Recreation Engineering Inc.	Recreation Engineering Inc.	P	DE
Bob Murphy	Occams Razor Technical Services	Occams Razor Technical Services	O	G
Reid Neslage	H & H Specialties Inc.	H & H Specialties Inc.	P	MP
Mark Newlin	Xtreme Structures and Fabrication	Xtreme Structures and Fabrication	A	MP
Jim Niesel	Theatre Projects Consultants, Inc.	Theatre Projects Consultants, Inc.	P	DE
Richard J. Nix	Richard J. Nix	Richard J. Nix	I	G
Shawn Nolan	Production Resource Group	Production Resource Group	A	DR
Tracy Nunnally	Vertigo	Vertigo	P	CP
Kimberly Corbett Oates	Schuler Shook	Schuler Shook	O	DE
Carlos Ortega	PSAV Presentation Services	PSAV Presentation Services	P	U
Gregory Orth	WNP Services, Inc.	WNP Services, Inc.	P	DR
Edward A. (Ted) Paget	Electronic Theatre Controls, Inc.	Electronic Theatre Controls, Inc.	O	MP
Miriam Paschetto	Geiger Engineers	Geiger Engineers	P	G
Michael Patterson	Pook Diemont & Ohl, Inc.	Pook Diemont & Ohl, Inc.	O	CP
Rocky Paulson	Stage Rigging, Inc.	Freeman Companies	A	DR
Kurt Pragman	Pragman Associates, LLC	Pragman Associates, LLC	O	G
Ty M. Prewitt	BellaTEX, Inc.	BellaTEX, Inc.	P	MP
Galen Price	Blue Man Group	Blue Man Group	O	U
Demian Purdy	PSAV Presentation Services	PSAV Presentation Services	A	U
Steven Ricks	Electronic Theatre Controls, Inc.	Electronic Theatre Controls, Inc.	P	MP

Name	Company	Representing	Voting status	Int cat
Mark Riddlesperger	LA ProPoint, Inc.	LA ProPoint, Inc.	O	CP
John Ringelman	Stage Rigging, Inc.	Freeman Companies	P	DR
Eric Rouse	Chicago Flyhouse	Chicago Flyhouse	P	CP
Karl G. Ruling	ESTA	ESTA	exf	G
Tim Salamon	PSAV Presentation Services	PSAV Presentation Services	O	DR
Bill Sapsis	Sapsis Rigging, Inc.	Sapsis Rigging, Inc.	P	U
Peter A. Scheu	Scheu Consulting Services, Inc.	Scheu Consulting Services, Inc.	O	DE
Chris Schmidt	Stage Rigging, Inc.	Freeman Companies	A	DR
Jason Schumacher	ZFX Flying Inc.	ZFX Flying Inc.	A	G
Joseph S. Schuster	Simpson Gumpertz & Heger	Simpson Gumpertz & Heger	P	DE
Ford Sellers	Chauvet Lighting	Chauvet Lighting	O	MP
Steven Serafin	Chubb Group of Insurance Companies	Chubb Group of Insurance Companies	P	G
Steven C. Shaw	Levitating Productions, Inc.	Levitating Productions, Inc.	O	MP
Harold Ike Shippers	Syracuse Scenery & Stage Lighting Co., Inc.	Syracuse Scenery & Stage Lighting Co., Inc.	A	DR
Q. Brian Sickels	Q. Brian Sickels	Q. Brian Sickels	O	G
Monica Skjonberg	Skjonberg Controls, Inc.	Skjonberg Controls, Inc.	O	CP
Knut Skjonberg	Skjonberg Controls, Inc.	Skjonberg Controls, Inc.	O	CP
John C. Snook	Thermotex Industries Inc.	Thermotex Industries Inc.	P	CP
Russell Solomon	Texas Scenic Company	Texas Scenic Company	A	DR
Todd Spencer	PSAV Presentation Services	PSAV Presentation Services	O	U
Stephen G. Surratt	Texas Scenic Company	Texas Scenic Company	P	DR
Peter V. Svitavsky	J.R. Clancy, Inc.	Wenger Corp.	P	CP
Ross Taylor	Taylor & Taylor Associates	Taylor & Taylor Associates	O	G
Jason Tello	Tyler Truss Systems	Tyler Truss Systems	P	CP
Ken Tilson	Columbus McKinnon Corp.	Columbus McKinnon Corp.	P	MP
Will Todd	Tomcat USA, Inc.	Milos Group	P	MP
James Tomlinson	Team Tomlinson	Team Tomlinson	O	G
Stephen Vanciel	IATSE Local 631	IATSE Local 631	O	U
Elmer Veith	Total Structures - Eastern US Sales Office	Total Structures, Inc.	A	MP
Steve Walker	Steve A. Walker & Associates	Steve A. Walker & Associates	P	G
Patrick Wallace	PSAV Presentation Services	PSAV Presentation Services	O	U
Charlie Weiner	Tomcat USA, Inc.	Milos Group	A	MP
Michael Wells	Xtreme Structures and Fabrication	Xtreme Structures and Fabrication	P	MP
Drew Wending	PSAV Presentation Services	PSAV Presentation Services	O	DR

Name	Company	Representing	Voting status	Int cat
Marty Wesstrom	Mountain Productions Inc.	Mountain Productions Inc.	P	DR
Jeff Wilkowski	Them, Inc.	Them, Inc.	A	MP
Greg Williams	PSAV Presentation Services	PSAV Presentation Services	O	G
R. Duane Wilson	George C. Izenour Associates	Amer. Society of Theatre Consultants	P	DE
Max A. Wilson	Applied Electronics	Applied Electronics	P	MP
Stephan Jon Wood	Stage Technologies	Tait Towers Manufacturing LLC	P	CP
Nicholas Gill Wright	I.A.T.S.E. Local 16	I.A.T.S.E. Local 16	O	G
Jeong Sik Yoo	Korea Testing Laboratory	Korea Testing Laboratory / Theatre Safety Center	O	DE
Paul Zagajeski	J.R. Clancy, Inc.	Wenger Corp.	A	CP

Voting Status Key: P = Principal voter, A = Alternate voter, I = Individual voter, O = Observer member, exf = Ex Officio member (staff)

Interest Category Key: CP = Custom-market producer, DE = Designer, DR = Dealer or rental company, G = General interest, MP = Mass-market producer, U = User