

**Minutes**  
**Rigging Working Group**  
Friday, 29 January 2016  
D/FW Marriott Solana  
Westlake, TX

**Presiding co-chairs:**

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

**Recording secretaries:** Karl G. Ruling; ESTA and Erin Grabe; ESTA

**Members in attendance:**

Brent Armstrong; Alpine Rigging & Structural Design; O; U  
Keith Bohn; I; G  
William Bradburn; Aerial Arts, Inc.; P; U  
Joseph Champelli; Entertainment Project Services, LLC; P; DE  
Dan Culhane; SECOA; P; CP  
Bruce Darden; Rigging Innovators, Inc.; P; CP  
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  
Ed Garstkievicz; Harting Inc., North America; Harting KGAA; P; G  
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  
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 Hochman; Full Throttle Films/ VER; O; DR  
Donald Hoffend\_III; Avista Designs, LLC; A; G  
Stephen Lars Klein; O; DE  
Edwin S. Kramer; I.A.T.S.E. Local 1; P; U  
Roger Lattin; I.A.T.S.E. Local 728; P; U  
Jon Lenard; Applied Electronics; 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 Inventerprises, Inc.; P; CP  
Bob McVay; Schuler Shook; A; DE  
John P. Moore; Hall Associates Flying Effects; A; CP  
Reid Neslage; H & H Specialties Inc.; P; MP  
Jim Niesel; Theatre Projects Consultants, Inc.; P; DE  
Richard J. Nix; ZFX Flying, Inc.; P; G  
Carlos Ortega; PSAV Presentation Services; P; U  
Galen Price; Blue Man Group; P; U  
Woody Pyeatt; A V Pro, Inc.; P; DR  
Gregory Quinkert; Motion Laboratories; A; CP  
John Ringelman; Stage Rigging, Inc.; Freeman Companies; P; DR  
Heather Rowe; Contract Services Administration Trust Fund; A; U  
Peter A. Scheu; Scheu Consulting Services, Inc.; P; DE  
Steven Serafin; Chubb Group of Insurance Companies; O; G

John C. Snook; Thermotex Industries Inc.; P; CP  
Russell Solomon; Texas Scenic Company; A; DR  
Peter V. Svitavsky; J.R. Clancy, Inc.; Wenger Corp.; P; CP  
Ken Tilson; Columbus McKinnon Corp.; P; MP  
Will Todd; Tomcat USA, Inc.; Milos Group; P; MP  
James Tomlinson; Team Tomlinson; O; G  
Stephen Vanciel; IATSE Local 631; O; U  
Elmer Veith; Total Structures - Eastern US Sales Office; Total Structures, Inc.; A; MP  
Steve Walker; Steve A. Walker & Associates; P; G  
R. Duane Wilson; George C. Izenour Associates; Amer. Society of Theatre Consultants; P; DE  
Max A. Wilson; Applied Electronics; P; MP  
Stephan Jon Wood; Stage Technologies; Tait Towers Manufacturing LLC; P; CP  
Paul Zagajeski; J.R. Clancy, Inc.; Wenger Corp.; A; CP

**Visitors:**

Neil Huff; Taylor & Taylor  
Michael Lay; Philips Lighting

see ErinTemp folder for E1.50 files.

**1 Opening remarks**

Bill Sapsis called the meeting to order at 14:02. He welcomed everyone to balmy Westlake, Texas, and thanked them for donating their time. ESTA thanks you for your continued support and participation, he added.

**2 Attendance and membership**

**2.1 Introductions of those present and taking attendance**

Self-introductions went counterclockwise around the room while a bright pink sign-in sheet went clockwise. After the introductions of those present, Erin Grabe read the list of names of those on-line, attending remotely.

**2.2 Call for quorum**

Bill Sapsis counted the raised hands of voters in the room, and then looked to the voters online raising their WebEx hands. More than 35 voters were present, so a supermajority was announced present.

**2.3 Requirements for membership, *new***

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 missed the last three meetings and were moved to Observer status:

Jerald Kraft; JTH Lighting Alliance; P; CP

The following member was removed due to emails bouncing back:

Philip J. Piszczak; The National Telephone Supply Company; O; G

The following members were removed on request:

Gary Mardling; Kish Rigging; O; DR  
Joachim Stoecker; CAMCO GmbH; O; MP  
Nils Becker; Electronic Theatre Controls, Inc.; A; MP  
Scott Mohr; R&R Cases and Cabinets; O; G  
JoAnna Lloyd; Vincent Lighting Systems; O; U  
Robert Young; ARUP; O; DE

Ben Peoples; Pittsburgh Hoist & Sandbag Company; O; CP  
Daniel Houser; Real Rigging Solutions, LLC; O; U

## 2.5 Processing of new membership and change in status requests:

Richard Nix; Entertainment Structures Group to ZFX Flying, Inc.; P; G  
Robert Dean; ZFX Flying, Inc.; P to A; CP  
Sanford P. Gilzow; Shur-Rig LLC; O to P; G  
Ed Garstkiewicz; Harting Inc., North America; Harting KGAA; O to P; G  
Carlos Ortega; PSAV Presentation Services; O to P; U  
Todd Spencer; PSAV Presentation Services; O to A; U

Dan Culhane moved to approve the changes in status and representation. The motion was seconded and approved by a show of hands and voice votes.

Bill Sapsis then announced that Woody Pyeatt is retiring. Woody Pyeatt confirmed he is already retired as of only very recently. He said that he would not continue his work with this group after this meeting, and that he was taking on a full-time job as a grandfather. The RWG applauded Woody and his long career.

## 2.6 Above & Beyond Awards

Bill Sapsis announced that the E1.43 task group are recipients of Above & Beyond Award for 2016. Bill commended the group for their efforts in completing a very difficult, sometime contentious project. The hard work of task group members Mark Ager, Dana Bartholomew, Joe Champelli, Bill Gorlin (Chair), Rod Haney, Dan Lisowski, Joe McGeough, and Orestes Mihaly were acknowledged by the RWG with a round of applause.

Karl Ruling asked the task group members who were present to stay after the meeting for a moment to take a picture.

Bill Sapsis reminded the group that the the nomination site for the Above & Beyond Awards is open year round at [tsp.plasa.org/AboveandBeyond](http://tsp.plasa.org/AboveandBeyond).

## 2.7 Consensus body

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

Name	Representing	Voting status	Interest category
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
Ted Jones	Art Drapery Studios	P	U
Donald A. Hoffend_Jr.	Avista Designs, LLC	P	G
Donald Hoffend_III	Avista Designs, LLC	A	G
Woody Pyeatt	A V Pro, Inc.	P	DR
Galen Price	Blue Man Group	P	U
Ken Tilson	Columbus McKinnon Corp.	P	MP
Herb Hart	Columbus McKinnon Corp.	A	MP
David Carmack	Columbus McKinnon Corp.	A	MP
Jennifer O'Leary	Columbus McKinnon Corp.	A	MP
Matthew Antonucci	Contract Services Administration Trust Fund	P	U
Heather Rowe	Contract Services Administration Trust Fund	A	U

Name	Representing	Voting status	Interest category
Don Earl	Earl Girls, Inc.	P	DR
Steven Ricks	Electronic Theatre Controls, Inc.	P	MP
Michael Lichter	Electronic Theatre Controls, Inc.	A	MP
Joseph Champelli	Entertainment Project Services, LLC	P	DE
Steven Michelman	Entertainment Project Services, LLC	A	DE
Joseph McGeough	Foy Invenenterprises, Inc.	P	CP
John Ringelman	Freeman Companies	P	DR
Rocky Paulson	Freeman Companies	A	DR
Chris Schmidt	Freeman Companies	A	DR
Miriam Paschetto	Geiger Engineers	P	G
Reid Neslage	H & H Specialties Inc.	P	MP
Tracy Nunnally	Hall Associates Flying Effects	P	CP
John P. Moore	Hall Associates Flying Effects	A	CP
Ed Garstkiewicz	Harting KGAA	P	G
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
Jonathan Deull	JSD Projects LLC	I	U
Keith Bohn	Keith Bohn	I	G
William Beautyman	Limelight Productions, Inc.	P	DR
Scott Battaglia	LMG Inc.	P	DR
William B. Gorlin	M.G. McLaren, P.C.	P	G
Mike Adamovich	M.G. McLaren, P.C.	A	G
Mike Garl	Mike Garl Consulting LLC	P	DE
Will Todd	Milos Group	P	MP
Scott Johnson	Milos Group	A	MP
Charlie Weiner	Milos Group	A	MP
Vincent J. Cannavale	Motion Laboratories	P	CP
Peter Herrmann	Motion Laboratories	A	CP
David Herrmann	Motion Laboratories	A	CP
Gregory Quinkert	Motion Laboratories	A	CP
Marty Wesstrom	Mountain Productions Inc.	P	DR
Tim Hansen	Oasis Stage Werks	P	DR
Orestes Mihaly	Production Resource Group	P	DR
Shawn Nolan	Production Resource Group	A	DR

Name	Representing	Voting status	Interest category
Carlos Ortega	PSAV Presentation Services	P	U
Todd Spencer	PSAV Presentation Services	A	U
Rick Montgomery	R&M Materials Handling	P	MP
Tracie Allen	R&M Materials Handling	A	MP
Bruce Darden	Rigging Innovators, Inc.	P	CP
Jesse Adams	Rose Brand	P	DR
Bill Sapsis	Sapsis Rigging, Inc.	P	U
Peter A. Scheu	Scheu Consulting Services, Inc.	P	DE
Kimberly Corbett Oates	Schuler Shook	P	DE
Joshua Grossman	Schuler Shook	A	DE
Bob McVay	Schuler Shook	A	DE
Dan Culhane	SECOA	P	CP
Joseph Jeremy	Show Distribution Group, Inc.	P	MP
Jean-Phillippe Robitaille	Show Distribution Group, Inc.	A	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
Mark Ager	Tait Towers Manufacturing LLC	A	CP
Stephen G. Surratt	Texas Scenic Company	P	DR
Rick Rosas	Texas Scenic Company	A	DR
Joel A Guerra	Texas Scenic Company	A	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
Dan Lisowski	University of Wisconsin - Madison	P	U
John Van_Arsdale	University of Wisconsin - Madison	A	U

Name	Representing	Voting status	Interest category
Christopher Jacobs	Virginia Beach City Public Schools	P	U
Pete Happe	Walt Disney Company	P	U
Jeff T. Miller	Walt Disney Company	A	U
Earle T. Greene	Walt Disney Company	A	U
Ian Bevan	Walt Disney Company	A	U
Nick Fleming	Walt Disney Company	A	U
Peter V. Svitavsky	Wenger Corp.	P	CP
Patrick Finn	Wenger Corp.	A	CP
Paul Zagajeski	Wenger Corp.	A	CP
Gregory Orth	WNP Services, Inc.	P	DR
Robert Ramsey	WNP Services, Inc.	A	DR
Michael Wells	Xtreme Structures and Fabrication	P	MP
Mark Newlin	Xtreme Structures and Fabrication	A	MP
Richard J. Nix	ZFX Flying, Inc.	P	CP
Robert Dean	ZFX Flying Inc.	A	CP
<b>Voting Status Key: P = Principal voter, A = Alternate voter, I = Individual voter</b>			
<b>Votes by Interest Category:</b>			
Custom-market producer		CP	9
Designer		DE	7
Dealer or rental company		DR	13
General interest		G	0
Mass-market producer		MP	11
User		U	15
<b>Total votes possible:</b>			<b>65</b>

### 3 Approval of minutes from the previous meeting

See the draft minutes of the October meeting, *RIGmin10-2015.pdf*.

Roger Lattin moved to approve the minutes of the October meeting as drafted. The motion was seconded and approved by a show of hands in the room and online.

### 4 ESTA declarations

#### 4.1 Reading of the NEW 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 a ESTA meeting, please bring your concern to ESTA management. An easy to read pamphlet describing the antitrust laws is available from the ESTA staff.

Karl Ruling held up the pamphlet. Nothing was reported.

#### **4.2 Reading of the NEW 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.

Bruce Darden read a patent statement related to the use of E1.21. Karl Ruling asked that a letter of reasonable and non-discriminatory licensing be issued immediately to staff.

#### **5 Approval of the agenda**

Dan Culhane moved to approve the agenda as drafted. The motion was seconded and approved by a show of hands present and online.

#### **6 Old business**

##### **6.1 ANSI E1.1 - 2012, wire rope ladders (revision, reaffirmation, or withdrawal by 2017)**

No news or action at this time.

##### **6.2 ANSI E1.2 - 2012, Entertainment Technology - Design, Manufacture and Use of Aluminum Trusses and Towers (revision, reaffirmation, or withdrawal by 2017)**

Bill Sapsis noted that an OSHA inspector downloaded this document for an investigation and complimented the service. He offered kudos to the group for the reach of this document.

##### **6.3 BSR E1.4-1 - 201x, Entertainment Technology--Manual Counterweight Rigging Systems**

*See DraftResols\_E1-4-1\_ScndRevw.pdf and BSR\_E1\_4-1-201x\_2014-2029r5.pdf.*

Richard Nix reported on the resolutions and noted that there are some errors that should be fixed now. The group went through a short list of resolutions needing consideration and the draft resolutions were revised to the consensus of the group. The draft standard was also revised to include the agreed upon changes to the resolutions.

Pete Svitavsky moved to approve the resolutions as amended at this meeting. The motion was seconded and unanimously approved with no objections or abstentions. *See ApprvdResols\_E1-4-1\_ScndRevw\_r1.pdf.*

Richard Nix then moved to offer the revised draft standard for public review. The motion was seconded and unanimously approved with no objections or abstentions.

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

No news or action at this time.

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

No news or action at this time.

**6.6 ANSI E1.6-1 - 2012, Entertainment Technology--Powered Hoist Systems** (revision, reaffirmation, or withdrawal by 2017)

*From the draft October minutes:*

*Bruce Darden said that a task group should be formed by January to have a document for review by 2017.*

*Bruce Darden said that he is willing to serve on task group. Bill Sapsis said that the question will be asked in January.*

Bruce Darden reported that Dan Culhane and Pete Svitavsky agree with him that there is work to be done to coordinate this standard with other E1 standards. For example, E1.22 defers to E1.6 for control, but “fire” does not appear anywhere in E1.6-1. There is no way to abort the descent of fire curtain if it is deployed unintentionally. Other issues include addressing stepped drums, such as the lifting drum used in an ETC Prodigy hoist.

Eddie Kramer moved that we open the document for revision and file a PINS with ANSI. The motion was seconded and unanimously approved by supermajority with no objections and no abstentions.

Bill Sapsis appointed the task group as follows: Dan Culhane, Pete Svitavsky, Bruce Darden (Chair), Sandy Gilzow, Joe Champelli, Christine Kaiser, and Jim Niesel.

**6.7 ANSI E1.6-2 - 2013, Entertainment Technology--Design, Inspection, and Maintenance of Electric Chain Hoists for the Entertainment Industry** (revision, reaffirmation, or withdrawal by 2018)

No news or action.

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

No news or action.

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

No news or action.

**6.10 ANSI E1.8 - 2012, Entertainment Technology--Loudspeaker Enclosures Intended for Overhead Suspension--Classification, Manufacture and Structural Testing** (revision, reaffirmation, or withdrawal by 2017)

No news or action.

**6.11 ANSI E1.15 - 2006 (R2011), Entertainment Technology--Recommended Practices and Guidelines for the Assembly and Use of Theatrical Boom & Base Assemblies** (revision, reaffirmation, or withdrawal by 2016)

Richard Nix moved that the standard be reaffirmed. The motion was seconded. A letter ballot will be issued.

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

*The same OSHA inspector from item 6.2 also downloaded this document for the investigation.*

Richard Nix reported that E1.21 is referenced in 2015 International Fire Code. He noted that the tent industry contacts he's spoken with have said that E1.21 could apply to tents and membrane structures, but that tents and membrane structures are left out of the scope.

The group briefly discussed how to help the tent industry produce their own version of E1.21, using the procedures set forth in the TSC's Our Common Goals Initiative. Mike Garl noted that the people in the room were not a consensus body for tent and membrane structures; we need to have the tent community at the table, Mike Garl said, and extending our standards-writing process also comes at a price.



### **6.13 BSR E1.22 - 20xx, Entertainment Technology - Fire Safety Curtain Systems**

*See BSR\_E1-22-201x\_2002-2032r14.pdf and DraftResols\_BSR\_E1-22\_2ndRvw.pdf. Revision 14 makes no substantive changes to the document as offered for public review.*

Dan Culhane moved to accept the draft resolutions as distributed. The motion was seconded and unanimously approved by a show of hands with no abstentions or objections.

Dan Culhane then moved that draft standard be accepted as an American National Standard. That motion was seconded and there was brief discussion on an incorrect clause number and annex note reference number. Clause 11.3.2 was changed to 11.3.1, and the annex note reference number was fixed. The motion will be decided by letter ballot.

### **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 2020)**

No news or action.

### **6.15 BSR E1.43 - 201x, Live performer flying effect standard**

Bill Sapsis noted that the TSC had approved of the motion to accept BSR E1.43 as an American National Standard and that it was forwarded to the Executive Committee for approval.

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

Dan Lisowski reported that the CPWG will be working with this standard for a possible CP automation standard. He said that there was a meeting taking place this weekend and invited interested RWG members to attend, but, noted that, as of right now, this was a study group and not a formal task group.

### **6.17 Rigging Glossary**

Chris Kaiser said that this group was not meeting during this set of meetings, but that they will meet in March.

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

*See the unsubstantively revised draft standard, BSRE1-47\_Rig-2014-2003r4.pdf, and the draft resolutions, BSRE1-47\_ScndRvw\_DraftResols.pdf.*

Pete Svitavsky moved to approve comment resolutions as distributed. The motion was seconded and unanimously approved by a show of hands with one abstention.

Chris Kaiser then moved to accept the draft standard as an American National Standard. The motion was immediately seconded, then there was some discussion on the inspection frequency matrix and the inspection of the lifting medium along the entire length. The draft standard was modified to make it clear that the lifting medium is included in “all components” needing to be inspected. Karl Ruling said that this was not a substantive change, since no reasonable person would think that the lifting medium is not a component. The group confirmed approval of version 4.1, as amended at this meeting. The motion will be decided by letter ballot.

### **6.19 BSR E1.50—Video wall project**

Richard Nix reported that the draft resolutions and revised draft standard will be sent out to people after this meeting, as he'd only handed them to staff just minutes before the meeting. He asked that people read them and consider them, so that public review can be voted on in March.

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

Carlos Ortega reported on the progress of the task group. He noted that the intent is to have a draft document for the group to consider at the USITT meeting.

## **7 New business**

Specifier boiler plate was questioned by Bruce Darden, saying that it's outdated. Michael Lay, visiting co-chair of the Control Protocols Working Group, asked Bruce to submit updated text to him to compile an updated version.

## **8 Other business and announcements**

Woody Pyeatt announced that AV Pro has a position open for a rigger since he is retiring.

### **8.1 TSP participation fee**

Bill Sapsis gave thanks to those who have settled their 2016 TSP participation fees. He urged the group to log in and take care of this sooner rather than later, and to contact Erin Grabe if there were any problems or questions.

### **8.3 CEN standards update**

Karl Ruling said that there was a related article in the most issue of Protocol, the Winter 2016 issue.

## **9 Schedule for future meetings**

See <http://na.plasa.org/news/meetings.php> for the most current schedule.

### **9.1 USITT 2016**

Bill Sapsis reminded the group that the next meeting is scheduled for Thursday, 17 March 2016 at the Salt Lake Downtown Marriott [at City Creek], in conjunction with USITT 2016, taking place 16-19 March 2016.

### **9.2 July 2016 meetings in conjunction with NATEAC**

Bill Sapsis reminded the group that the July 2016 meetings will be held in conjunction with NATEAC in New York City. Meeting dates are tentatively scheduled for 14-18 July, while the conference dates are 17-18 July 2016. Information on the conference is available at <http://www.nateac.org/>.

## **10 Adjournment**

Bruce Darden moved to adjourn. The motion was seconded. Hearing no objection, Bill Sapsis declared the meeting adjourned at 16:56.

Name	Company	Representing	Voting status	Int cat
Mike Adamovich	McLaren Engineering Group	M.G. McLaren, P.C.	A	G
Jesse Adams	Rose Brand	Rose Brand	P	DR
Mark Ager	Stage Technologies	Tait Towers Manufacturing LLC	A	CP
Tracie Allen	R&M Materials Handling	R&M Materials Handling	A	MP
Frank Allison	Frank Allison	Frank Allison	O	G
Matthew Antonucci	Contract Services Administration Trust Fund	Contract Services Administration Trust Fund	P	U
Brent Armstrong	Alpine Rigging & Structural Design	Alpine Rigging & Structural Design	O	U
John Van_Arsdale	University of Wisconsin - Madison	University of Wisconsin - Madison	A	U
William Ian Auld	Auld Entertainment	Auld Entertainment	O	U
Rinus Bakker	Rhino Rigs B.V.	Rhino Rigs B.V.	O	G
Robert Barbagallo	Solotech Inc.	Solotech Inc.	O	DR
Roger Barrett	Star Events Group Ltd.	Star Events Group Ltd.	O	DR
Scott Battaglia	LMG Inc.	LMG Inc.	P	DR
F. Robert Bauer	F.R. Bauer & Associates, LLC	F.R. Bauer & Associates, LLC	O	G
William Beautyman	Limelight Productions, Inc.	Limelight Productions, Inc.	P	DR
Maria Bement	MGM Grand	MGM Grand	O	U
Ian Bevan	Walt Disney Parks and Resorts	Walt Disney Company	A	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
Ron Bonner	PLASA Technical Resources Office	PLASA EU	O	G
William Bradburn	Aerial Arts, Inc.	Aerial Arts, Inc.	P	U
Louis Bradfield	Louis Bradfield	Louis Bradfield	O	U
Buddy Braile	Bestek Lighting & Staging	Bestek Lighting & Staging	O	U
Barry Brazell	Barry Brazell	Barry Brazell	O	U
André Broucke	André Broucke	André Broucke	O	G
David M. Campbell	Geiger Engineers	Geiger Engineers	O	G
Vincent J. Cannavale	Motion Laboratories	Motion Laboratories	P	CP
Timothy Carlson	Circus Juventas	Circus Juventas	O	G
David Carmack	Columbus McKinnon Corp.	Columbus McKinnon Corp.	A	MP
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	Reed Rigging, Inc.	Reed Rigging, Inc.	O	DR
Dan Culhane	SECOA	SECOA	P	CP
Bruce Darden	Rigging Innovators, Inc.	Rigging Innovators, Inc.	P	CP
Randall W. A. Davidson	Risk International & Associates, Inc.	Risk International & Associates, Inc.	O	U

Name	Company	Representing	Voting status	Int cat
Robert Dean	ZFX Flying Inc.	ZFX Flying Inc.	A	CP
François Deffarges	Nexo	Nexo	O	MP
Jonathan Deull	JSD Projects LLC	JSD Projects LLC	I	U
Jim Digby	The Collaborative Endeavor Group	Linkin Park Touring/The Collective	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
Noga Eilon-Bahar	Eilon Engineering Industrial Weighing Systems	Eilon Engineering Industrial Weighing Systems	O	MP
James B. Evans	Mountain Productions Inc.	Mountain Productions Inc.	O	DR
Patrick Finn	J.R. Clancy Inc.	Wenger Corp.	A	CP
Nick Fleming	Walt Disney Parks and Resorts U.S.	Walt Disney Company	A	U
Adrian Forbes-Black	Total Structures, Inc.	Total Structures Inc.	P	MP
Howard Forryan	Harting Ltd.	Harting KGAA	O	G
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
Ed Garstkiewicz	Harting Inc., North America	Harting KGAA	P	G
Chris Geisler	Fluid Design Inc.	Fluid Design Inc.	O	DE
Ethan William Gilson	ALPS	Advanced Lighting and Production Services	P	U
Sanford P. Gilzow	Shur-Rig LLC	Shur-Rig LLC	P	G
Rand Goddard	W.E. Palmer Co.	W.E. Palmer Co.	O	CP
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
Thomas M. Granucci	Associated Students, Cox Arena	San Diego State University	O	U
Earle T. Greene	Walt Disney Parks and Creative Entertainment	Walt Disney Company	A	U
Pat Grenfell	Hoist Sales & Service	Hoist Sales & Service	P	DR
Joshua Grossman	Schuler Shook	Schuler Shook	A	DE
Joel A Guerra	Texas Scenic Company	Texas Scenic Company	A	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	Walt Disney Imagineering	Walt Disney Company	P	U
Sean Harding	Port Lighting Systems	Port Lighting Systems	O	G
Greg Hareld	Kleege Industries	Kleege Industries	O	U
Dean Hart	Stage Rigging, Inc.	Freeman Companies	O	U

Name	Company	Representing	Voting status	Int cat
Herb Hart	Columbus McKinnon Corp.	Columbus McKinnon Corp.	A	MP
Philip Heron	San Francisco Opera Assn.	San Francisco Opera Assn.	O	U
Peter Herrmann	Motion Laboratories	Motion Laboratories	A	CP
David Herrmann	Motion Laboratories	Motion Laboratories	A	CP
Ted Hickey	OAP Audio Products	OAP Audio Products	O	MP
Chris Higgs	Total Solutions Group	Total Solutions Group	O	G
Jeremy Hochman	Full Throttle Films/ VER	Full Throttle Films/ VER	O	DR
Donald Hoffend_III	Avista Designs, LLC	Avista Designs, LLC	A	G
Christopher Jacobs	Virginia Beach City Public Schools	Virginia Beach City Public Schools	P	U
Wes Jenkins	Down Stage Right Industries	Down Stage Right Industries	O	CP
Joseph Jeremy	Niscon Inc.	Show Distribution Group, Inc.	P	MP
Scott Johnson	Tomcat USA, Inc.	Milos Group	A	MP
Ted Jones	Art Drapery Studios	Art Drapery Studios	P	U
Kent H. Jorgensen	IATSE Local 80	IATSE Local 80	O	G
Donald A. Hoffend_Jr.	Avista Designs, LLC	Avista Designs, LLC	P	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
Nevin Kleege	Kleege Industries	Kleege Industries	O	U
Stephen Lars Klein	Stephen Lars Klein	Stephen Lars Klein	O	DE
Jerald Kraft	JTH Lighting Alliance	JTH Lighting Alliance	O	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
Ken P. Lager	LaFace & McGovern Associates	LaFace & McGovern Associates	O	DR
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
John Van Lennep	Theatrix Inc.	Theatrix Inc.	O	DR
Mylan Lester	Creation Logics Ltd.	Creation Logics Ltd.	O	U
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
Baer Long	Ninja Rigging	Act 1 Rigging Inc.	O	G
Dennis J. Lopez	Automatic Devices Co.	Automatic Devices Co.	O	MP
Daniel H. Louis	Theta Consulting LLC	Theta Consulting LLC	P	G
Jeff Lucas	Cirque Du Soleil, Inc.	Cirque Du Soleil, Inc.	O	G
Darren Lucier	North Guard Fall protection Inc.	North Guard Fall protection Inc.	O	U
Sam Lunetta	Michael Andrews	Michael Andrews	O	DR
Wendy Manson	Cirque Du Soleil, Inc.	Cirque Du Soleil, Inc.	O	U
Magali Marcheschi	Polytechnic Montreal	Polytechnic Montreal	O	G

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Chuck McClelland	Jeamar Winches Inc.	Jeamar Winches Inc.	O	MP
Joseph McGeough	Flying by Foy	Foy Inverterprises, Inc.	P	CP
Bob McVay	Schuler Shook	Schuler Shook	A	DE
Richard C. Mecke	Texas Scenic Company	Texas Scenic Company	O	DR
Sam Michael	Thern, Inc.	Thern, 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
Hank Miller	W.E. Palmer Co.	W.E. Palmer Co.	O	CP
Jeff T. Miller	Worldwide Standards and Auditing	Walt Disney Company	A	U
John Miller	University of North Carolina School of the Arts	University of North Carolina School of the Arts	O	U
Shaun Millington	SEW-Eurodrive, Inc.	SEW-Eurodrive, Inc.	O	MP
Timothy Mills	Geiger Engineers	Geiger Engineers	O	G
Rick Montgomery	R&M Materials Handling	R&M Materials Handling	P	MP
John P. Moore	Hall Associates Flying Effects	Hall Associates Flying Effects	A	CP
Bartholomew J. Mueller	Recreation Engineering Inc.	Recreation Engineering Inc.	O	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
Rikki Newman	Rikki Newman	Rikki Newman	O	U
Jim Niesel	Theatre Projects Consultants, Inc.	Theatre Projects Consultants, Inc.	P	DE
Richard J. Nix	ZFX Flying, Inc.	ZFX Flying, Inc.	P	G
Shawn Nolan	Production Resource Group	Production Resource Group	A	DR
Tracy Nunnally	Hall Associates Flying Effects	Hall Associates Flying Effects	P	CP
Jennifer O'Leary	Columbus McKinnon Corp.	Columbus McKinnon Corp.	A	MP
Kimberly Corbett Oates	Schuler Shook	Schuler Shook	P	DE
Carlos Ortega	PSAV Presentation Services	PSAV Presentation Services	P	U
Gregory Orth	WNP Services, Inc.	WNP Services, Inc.	P	DR
Michael Parrella	Arup	Arup	O	DE
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
G. Anthony Phillips	I.A.T.S.E. Local 16	I.A.T.S.E. Local 16	O	U
Kurt Pragman	Pragman Associates, LLC	Pragman Associates, LLC	O	G
Galen Price	Blue Man Group	Blue Man Group	P	U
Gregory Quinkert	Motion Laboratories	Motion Laboratories	A	CP
Robert Ramsey	WNP Services, Inc.	WNP Services, Inc.	A	DR
Steven Ricks	Electronic Theatre Controls, Inc.	Electronic Theatre Controls, Inc.	P	MP

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Mark Riddlesperger	LA ProPoint, Inc.	LA ProPoint, Inc.	O	CP
John Ringelman	Stage Rigging, Inc.	Freeman Companies	P	DR
Jean-Phillippe Robitaille	Show Distribution Group, Inc.	Show Distribution Group, Inc.	A	MP
Rick Rosas	Texas Scenic Company	Texas Scenic Company	A	DR
Heather Rowe	Contract Services Administration Trust Fund	Contract Services Administration Trust Fund	A	U
Karl G. Ruling	ESTA	ESTA	exf	G
Shawn Sack	A.C.T. Lighting	A.C.T. Lighting	O	DR
Bill Sapsis	Sapsis Rigging, Inc.	Sapsis Rigging, Inc.	P	U
Peter A. Scheu	Scheu Consulting Services, Inc.	Scheu Consulting Services, Inc.	P	DE
Chris Schmidt	Stage Rigging, Inc.	Freeman Companies	A	DR
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	O	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
William Scott Sloan	William Scott Sloan	William Scott Sloan	O	U
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	A	U
Michael L. Savage, Sr.	Middle Dept. Inspection Agency, Inc.	Middle Dept. Inspection Agency, Inc.	O	G
Rob Stevenson	SEW-Eurodrive, Inc.	SEW-Eurodrive, Inc.	O	MP
Stephen G. Surratt	Texas Scenic Company	Texas Scenic Company	P	DR
Karl V. Sutter-III	Kimley-Horn and Associates, Inc.	Kimley-Horn and Associates, Inc.	O	DE
Andy Sutton	AFX UK Ltd.	AFX UK Ltd.	O	U
Peter V. Svitavsky	J.R. Clancy, Inc.	Wenger Corp.	P	CP
Ross Taylor	Taylor & Taylor Associates	Taylor & Taylor Associates	O	G
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
Michael Viehmeyer	Michael Viehmeyer	Michael Viehmeyer	O	U
Steve Walker	Steve A. Walker & Associates	Steve A. Walker & Associates	P	G
Charlie Weiner	Tomcat USA	Milos Group	A	MP

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Michael Wells	Xtreme Structures and Fabrication	Xtreme Structures and Fabrication	P	MP
Marty Wesstrom	Mountain Productions Inc.	Mountain Productions Inc.	P	DR
Jeff Wilkowski	Thern, Inc.	Thern, Inc.	A	MP
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
Jiantong Wu	Beijing Special Engineering Design & Research Institute	Beijing Special Engineering Design & Research Institute	O	G
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