

Minutes
Rigging Working Group
Thursday, 15 March 2018, 7-11p.m.
Hilton Ft. Lauderdale Marina
Ft. Lauderdale, FL

Presiding co-chairs:

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

Recording secretaries: Karl Ruling and Erin Grabe; ESTA

Members in attendance:

Jesse Adams; Rose Brand; P; DR
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
Jay Cid; R&M Materials Handling / Stagemaker; A; MP
Jonathan Deull; JSD Projects LLC; I; U
Russ Dusek; I Weiss; P; MP
Don Earl; Earl Girls, Inc.; P; DR
Nick Fleming; Columbus McKinnon Corp.; A; MP
Mike Garl; Mike Garl Consulting LLC; P; DE
Sarah Gascoine; PSAV Presentation Services; A; U
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
Robert Haycock; Cal Performances; UC Berkeley; I; U
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; JTH Lighting Alliance; O; CP
Edwin S. Kramer; I.A.T.S.E. Local 1; P; U
Kyle Kusmer; Entertainment Structures Group; Steven Schaefer Associates; P; G
Kalen Larson; ZFX, Inc.; P; CP
Roger Lattin; I.A.T.S.E. Local 728; P; U
Daniel H. Louis; Theta Consulting LLC; P; G
Sam Michael; Thern, Inc.; P; MP
Orestes Mihaly; Production Resource Group; P; DR
Rick Montgomery; Motion Laboratories, Inc.; P; MP
Bartholomew J. Mueller; Recreation Engineering Inc.; P; DE
Jim Niesel; Theatre Projects Consultants, Inc.; P; DE
Richard J. Nix; I; G
Tracy Nunnally; Vertigo; P; CP
Miriam Paschetto; Geiger Engineers; P; G
Steven Ricks; Electronic Theatre Controls, Inc.; P; MP
John Ringelman; Stage Rigging, Inc.; Freeman Companies; P; DR
Chris Schmidt; Stage Rigging, Inc.; Freeman Companies; A; DR
Steven Serafin; Chubb Group of Insurance Companies; P; 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

Jason Tello; Tyler Truss Systems; P; CP
Will Todd; Tomcat USA, Inc.; Area Four Industries; P; MP
James Tomlinson; Team Tomlinson; O; G
Stephen Vanciel; IATSE Local 631; O; U
Elmer Veith; Total Structures, Inc.; Eurotruss; P; MP
Steve Walker; Steve A. Walker & Associates; P; G
Patrick Wallace; PSAV Presentation Services; O; U
Mike Webb; Motion Laboratories, Inc.; A; MP
Charlie Weiner; Total Structures, Inc.; Eurotruss; A; CP
Drew Wending; PSAV Presentation Services; O; DR
Marty Wesstrom; Mountain Productions Inc.; P; DR
Mike Weston; PSAV Presentation Services; O; DR
Greg Williams; PSAV Presentation Services; O; 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:

Gareth Conner; Creative Conners
Joe Clyaton; Stage Rigging
Jennifer Estremera; IATSE Local 16
Eric Silzer; Reed Rigging, Inc.
Greg Jackson; PSAV
Lisa Peterson

1 Opening remarks

Bill Sapsis called the meeting to order at 7:03 p.m. ET. He thanked everyone for their participation and efforts with standards and the Rigging Working Group, in particular.

2 Attendance and membership

2.1 Introductions of those present and taking attendance

An orange sign-in sheet went around the room while self-introductions took place.

2.2 Call for quorum

Bill Sapsis announced a quorum 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

Bill Sapsis announced that the following voter has missed the last three meetings and is being moved to Observer status:

Stewart Stephens; JSAV; DR

2.5 Processing of new membership and change in status requests:

Bill Sapsis said that, as of today, the following new applications or status change requests were received:

Robert Haycock; Cal Performances; UC Berkeley; I; U
Kalen Larson; ZFX; P; CP
David Bond; Kinesys USA Inc.; P; MP (Not present)

Charlie Weiner; Total Structures; Eurotruss; A; CP
 David Collette; PSAV; O;
 Will Todd; Area Four; P (change in representation)
 Tyler Bland; Disney; Walt Disney Parks & Resorts; A; U
 Russ Dusek; iWeiss; P (O to P)

Pat Grenfell moved to approve the applications and changes in status. The motion was seconded and approved by a show of hands.

2.6 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	Int cat
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
Will Todd	Area Four Industries	P	MP
Donald Hoffend_III	Avista Designs, LLC	P	G
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
Nick Fleming	Columbus McKinnon Corp.	A	MP
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
Elmer Veith	Eurotruss	P	MP
Charlie Weiner	Eurotruss	A	MP
John Ringelman	Freeman Companies	P	DR
Rocky Paulson	Freeman Companies	A	DR
Chris Schmidt	Freeman Companies	A	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

Name	Representing	Voting status	Int cat
Rod Haney	I.A.T.S.E. Local 891	P	U
Jonathan Osland	I.A.T.S.E. Local 891	A	U
Russ Dusek	I Weiss	P	MP
Bruce Darden	InterAmerica Stage, Inc.	P	CP
Stewart Stephens	JSAV	P	DR
Jonathan Deull	JSD Projects LLC	I	U
Keith Bohn	Keith Bohn	I	G
William Beautyman	Limelight Productions, Inc.	P	DR
William B. Gorlin	M.G. McLaren, P.C.	P	G
Mike Garl	Mike Garl Consulting LLC	P	DE
Rick Montgomery	Motion Laboratories, Inc.	P	MP
Mike Webb	Motion Laboratories, Inc.	A	MP
Marty Wesstrom	Mountain Productions Inc.	P	DR
Jacob E. Loretto	Musson Theatrical Inc.	P	DR
Tim Hansen	Oasis Stage Werks	P	DR
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
Sarah Gascoine	PSAV Presentation Services	A	U
Dave Sinkhorn	R&M Materials Handling / Stagemaker	P	MP
Jack Gallagher	R&M Materials Handling / Stagemaker	A	MP
Jay Cid	R&M Materials Handling / Stagemaker	A	MP
Bartholomew J. Mueller	Recreation Engineering Inc.	P	DE
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
Dana Bartholomew	Silver State Wire Rope and Rigging	P	DR
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

Name	Representing	Voting status	Int cat
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
Jason Tello	Tyler Truss Systems	P	CP
Tracie Allen	Tyler Truss Systems	A	CP
Robert Haycock	UC Berkeley	I	U
Dan Lisowski	University of Wisconsin - Madison	P	U
Tracy Nunnally	Vertigo	P	CP
John P. Moore	Vertigo	A	CP
Ian Bevan	Walt Disney Parks & Resorts	P	U
Peter V. Svitavsky	Wenger Corp.	P	CP
Dan Culhane	Wenger Corp.	A	CP
Paul Zagajeski	Wenger Corp.	A	CP
Michael Wells	Xtreme Structures and Fabrication	P	MP
Mark Newlin	Xtreme Structures and Fabrication	A	MP
Kalen Larson	ZFX, Inc.	P	CP
Voting Status Key: P = Principal voter, A = Alternate voter, I = Individual voter			
Votes by Interest Category:			
Custom-market producer		CP	8
Designer		DE	5
Dealer or rental company		DR	14
General interest		G	11
Mass-market producer		MP	12
User		U	13
Total votes possible:			63

3 Approval of minutes from the previous meeting

See *RIGmin01-2018.pdf*.

Pat Grenfell moved to approve the minutes as drafted. The motion was seconded and approved by show of hands.

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 or will not 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 a copy of the pamphlet. No anti-trust issues were raised.

4.2 Reading of the call for patents

The following statement is to be read aloud to the assembly:

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 by a show of hands.

6 Old business

6.1 BSR E1.1 – 2012 (R201x), wire rope ladders (open for revision)

Bill Sapsis announced that the TSC approved a first public review of this draft standard. The public review will run from 16 March 2018 through 30 April 2018.

6.2 BSR E1.2 - 20xx, Entertainment Technology - Design, Manufacture and Use of Aluminum Trusses and Towers (Last published in 2012 – Open for revision)

Keith Bohn has been busy, said Elmer Veith. Will Todd reported that the task group will have a meeting in the next two or three weeks.

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

Bart Mueller said that they met today and got through half the comments. Some that required a lot of discussion. He said he would like to have personal conversations with the commenters for some clarification, and that there is a meeting scheduled in a week and a half to continuing working.

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

Richard Nix said the group is halfway through draft resolutions and should be done by Dallas.

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

See E1-6-1_PRCCommentSmmry.pdf, distributed on 23 February. Comment resolutions are being drafted. Any news or action at this time?

Chris Kaiser said the group met today to work through half of the resolutions, and will work on the others going forward.

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 – Open for revision)

Erin Grabe said that a BSR9 form will be filed with ANSI for final action on 30 March 2018.

Richard Nix moved to open the document for revision immediately after it is published. The motion was seconded by discussion about the process. The motion carried by a show of hands with two abstentions.

6.8 BSR E1.6-3 - 201x, The Use of Electric Chain Hoists in the Entertainment Industry (Last published 2012 – Open for revision)

Elmer Veith reported that the task group met this morning. They thought they had an easier task at hand than they do, so they do not think they will have a document for July, but perhaps by the fall.

6.9 BSR E1.6-4 - 201x, Control of Electric Chain Hoists in the Entertainment Industry (Last published in 2013 – Open for revision)

Elmer Veith said that the group is meeting tomorrow.

6.10 BSR E1.8 – 20xx, Entertainment Technology—Loudspeaker Enclosures Intended for Overhead Suspension—Classification, Manufacture and Structural Testing (Last published in 2013 – Open for revision)

Bill Sapsis said that this draft standard is in public review through 23 April 2018.

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 BSR E1.21 - 20xx, Entertainment Technology — Temporary Structures Used for Technical Production of Outdoor Entertainment Events (originally published 19 December 2013 – open for revision)

There have been some good discussions, said Richard Nix ,about what he believes everyone believes to be important subject matter, evacuation.

Bill Gorlin said that part of the discussion surrounded trading off lowered design wind loads with more stringent management plans.

Dan Louis spoke in favor of this, partially because his company is having a tough time meeting the standard to the letter. Bill Gorlin wants to schedule more WebEx meetings soon, to form a plan forward. Richard Nix said that the conversations are moving slowly due to their serious nature.

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

No news or action at this time.

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)

There was discussion as to whether or not this standard should move to the Stage Machinery WG. Karl Ruling noted that that would be a decision for the TSC, but that ultimately it may be better suited to stay with the RWG.

6.17 Rigging Glossary

Chris Kaiser reported that the project continues unchanged.

6.18 BSR E1.47 – 20xx, Recommended Guidelines for Entertainment Rigging System Inspections
(Originally published on 28 April 2017 – open for revision)

Any news or action at this time?

Chris Kaiser said they met in January and will meet again tomorrow. She is hoping that more people than showed up in CA will be here tomorrow.

6.19 ANSI E1.50-1 – 2017, Requirements for the Structural Support of Temporary LED, Video & Display Systems (Revision, reaffirmation, or withdrawal by 14 August 2022)

No news or action at this time.

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

Bill Sapsis said that this draft standard is in public review through 10 April 2018.

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

No report. The task group will meet on Saturday morning, noted Erin Grabe.

7 New business

7.1 Task group coordination

The task group leader and members of each task group should be listed for each open project. See agenda items for each project and the reflector lists at the end of the minutes.

- **BSR E1.1 – 2012 (R201x), Wire Rope Ladders**
Sandy Gilzow (Chair), Chris Schmidt, and Chris Kaiser
- **BSR E1.2 – 201x, ANSI E1.2 - 2012, Entertainment Technology - Design, Manufacture and Use of Aluminum Trusses and Towers**
Keith Bohn (Chair), Jason Tello, Will Todd, Jacob Abbott, Jerry Gorrell, Elmer Veith, and Mike Garl
- **BSR E1.4-2 - 201x, Entertainment Technology—Statically Suspended Rigging Systems**
Bart Mueller (Chair) Ethan Gilson, Ted Jones, Jesse Adams, and Brad Dittmer.
- **BSR E1.4-3 - 201x, Entertainment Technology—Manually Operated Hoist Rigging Systems**
Richard Nix and Sam Michael
- **BSR E1.6-1 - 201x, Entertainment Technology—Powered Hoist Systems**
Bruce Darden (chair), Chris Kaiser, Dan Culhane, Pete Svitavsky, Stephan Wood, Steve Ricks, Jim Niesel, Sandy Gilzow, Joe Champelli, and Steve Walker.
- **BSR E1.6-2 - 20xx, Entertainment Technology—Design, Inspection, and Maintenance of Electric Chain Hoists for the Entertainment Industry**
Ken Tilson, John Ringleman, Ben Brian, Marty Westrom, Rick Montgomery, Chris Schmidt, Herb Hart, Sandy Gilzow, and Elmer Veith (Chair)
- **BSR E1.6-3 - 201x, The Use of Electric Chain Hoists in the Entertainment Industry**
John Ringleman, Dan Lisowski, Herb Hart, Ben Brian, Pat Grenfell, Nick Fleming, Charlie Weiner, Rod Haney, Patrick Wallace, Greg Williams and Elmer Veith (Chair)
- **BSR E1.6-4 - 201x, Control of Electric Chain Hoists in the Entertainment Industry**
Rick Montgomery, John Ringleman, and Dan Lisowski (Chair), Elmer Veith, Jim Hodgson, Steve Wood, Mike Webb, Joe Jeremy

- **BSR E1.8 – 2012 (R201x), Entertainment Technology--Loudspeaker Enclosures Intended for Overhead Suspension--Classification, Manufacture and Structural Testing**
Sandy Gilzow and Jim Niesel
- **BSR E1.21 – 201x, Outdoor stages**
Richard Nix (Chair), Kyle Kusmer, Miriam Paschetto, Bill Gorlin, Dan Louis, Steve Serafin, Elmer Veith, Sandy Gilzow, and Rod Haney
- **BSR E1.47, Rigging systems inspections**
Bart Mueller, Chris Kaiser (chair), Tracy Nunally, Ted Jones, Duane Wilson, Pete Svitavsky, Eric Rouse, Ian Bevan, Russell Solomon
- **BSR E1.56, Rigging Support Points Design, Fabrication, Installation, and Testing**
Carlos Ortega (Chair), Demian Purdy, Mike Wells, Shawn Nolan, Jonathan Duell, and Chris Schmidt.
- **BSR E1.59 – 20xx, Automation Vector Transmission Protocol**
[RWG] Jem Hodgson, Joe Jeremy, Jim Love, Michael Lichter, and Dan Lisowski (Chair)
[CPWG] Julian Hoare, Roger Lattin, Scott Blair, Dan Murfin, Kevin Loewen, and Rich Dionne

8 Other business and announcements

8.1 Above & Beyond Awards

Bill Sapsis said that the nomination site is open year round at estalink.us/aboveandbeyond. Mike Garl explained that it is an award given to volunteers, nominated by their peers.

8.2 CEN standards update

Michael Lichter told Steven Ricks that it will go to public review any day now, says Steven Ricks.

8.3 Investors in Innovation

Bill Sapsis said that these are people who make financial contributions to the program.

8.4 New World Rigging Symposium

The NWRS was 13-14 March 2018.

Bill Sapsis thanked everyone who participated as a presenter or attendee. He noted a lot of great feedback and good discussions

8.5 ESTA leadership transition.

Erin Grabe noted her change in role, and announced her replacement: Richard Nix. There was a round of applause for both.

9 Schedule for future meetings

The full meeting schedule may be found at <http://www.esta.org/ESTA/meetings.php>.

9.1 July meetings

Bill Sapsis said that the July meetings are scheduled to be held 19-24 July 2018 at the D/FW Marriott Solana in Westlake, TX. The RWG meeting is scheduled for Friday, 20 July 2018, 2-6 p.m.

9.2 Fall meetings

Bill Sapsis said that the autumn meetings will be held 4-8 October 2018 at the D/FW Marriott Solana in Westlake, TX.

10 Adjournment

Pat Grenfell moved to adjourn. The motion was seconded and Bill declared the meeting adjourned at 8:07 p.m .

Name	Company	Representing	Voting status	Int cat
Jacob Abbott	PSAV Presentation Services	PSAV Presentation Services	O	U
Jesse Adams	Rose Brand	Rose Brand	P	DR
Tracie Allen	Tyler Truss Systems	Tyler Truss Systems	A	CP
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	Silver State Wire Rope and Rigging	Silver State Wire Rope and Rigging	P	DR
William Beautyman	Limelight Productions, Inc.	Limelight Productions, Inc.	P	DR
Ian Bevan	Walt Disney Parks and Resorts	Walt Disney Parks & Resorts	P	U
Roy Bickel	Roy Bickel	Roy Bickel	O	G
Scott M. Blair	Full Throttle Films/ VER	Full Throttle Films/ VER	O	DR
Keith Bohn	Keith Bohn	Keith Bohn	I	G
David Bond	Kinesys USA Inc.	Kinesys	O	MP
William Bradburn	Aerial Arts, Inc.	Aerial Arts, Inc.	P	U
Louis Bradfield	Louis Bradfield	Louis Bradfield	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
Jay Cid	R&M Materials Handling / Stagemaker	R&M Materials Handling / Stagemaker	A	MP
Daniel J. Clark	Clark-Reder Engineering, Inc.	Clark-Reder Engineering, Inc.	O	G
Benjamin Cohen	Chicago Flyhouse Inc.	Chicago Flyhouse Inc.	O	CP
David Collette	PSAV Presentation Services	PSAV Presentation Services	O	U

Name	Company	Representing	Voting status	Int cat
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.	O	CP
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	Columbus McKinnon Corp.	Columbus McKinnon Corp.	A	MP
Tim Franklin	Theta Consulting LLC	Theta Consulting LLC	O	G
Jack Gallagher	R&M Materials Handling / Stagemaker	R&M Materials Handling / Stagemaker	A	MP
Mike Garl	Mike Garl Consulting LLC	Mike Garl Consulting LLC	P	DE
James M. Garner	Walt Disney Studios - Disney Theatrical Group	Walt Disney Studios	O	G
Sarah Gascoine	PSAV Presentation Services	PSAV Presentation Services	A	U
Ethan William Gilson	ALPS	Advanced Lighting and Production Services	O	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

Name	Company	Representing	Voting status	Int cat
Pete Happe	Pete Happe	Pete Happe	O	G
Sean Harding	Port Lighting Systems	Port Lighting Systems	O	G
Herb Hart	Columbus McKinnon Corp.	Columbus McKinnon Corp.	A	MP
Robert Haycock	Cal Performances	UC Berkeley	I	U
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
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
Tom Lapp	Cirque Du Soleil, Inc.	Cirque Du Soleil, Inc.	A	U
Kalen Larson	ZFX, Inc.	ZFX, Inc.	P	CP
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
Ross Long	I.A.T.S.E. Local 891	I.A.T.S.E. Local 891	O	G
Jacob E. Loretto	Musson Theatrical Inc.	Musson Theatrical Inc.	P	DR

Name	Company	Representing	Voting status	Int cat
Daniel H. Louis	Theta Consulting LLC	Theta Consulting LLC	P	G
Wendy Manson	Cirque Du Soleil, Inc.	Cirque Du Soleil, Inc.	O	U
Joseph McGeough	Flying by Foy	Foy Invenerprises, Inc.	O	CP
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
Rick Montgomery	Motion Laboratories, Inc.	Motion Laboratories, Inc.	P	MP
John P. Moore	Vertigo	Vertigo	A	CP
Bartholomew J. Mueller	Recreation Engineering Inc.	Recreation Engineering Inc.	P	DE
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
Carlos Ortega	PSAV Presentation Services	PSAV Presentation Services	P	U
Gregory Orth	WNP Services, Inc.	WNP Services, Inc.	O	DR
Jonathan Osland	I.A.T.S.E. Local 891	I.A.T.S.E. Local 891	A	U
Miriam Paschetto	Geiger Engineers	Geiger Engineers	P	G
Rocky Paulson	Stage Rigging, Inc.	Freeman Companies	A	DR
Kurt Pragman	Pragman Associates, LLC	Pragman Associates, LLC	O	G
Demian Purdy	PSAV Presentation Services	PSAV Presentation Services	A	U
Steven Ricks	Electronic Theatre Controls, Inc.	Electronic Theatre Controls, Inc.	P	MP
Mark Riddlesperger	LA ProPoint, Inc.	LA ProPoint, Inc.	O	CP

Name	Company	Representing	Voting status	Int cat
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, Inc.	ZFX, Inc.	O	CP
Joseph S. Schuster	Simpson Gumpertz & Heger	Simpson Gumpertz & Heger	O	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
Dave Sinkhorn	R&M Materials Handling / Stagemaker	R&M Materials Handling / Stagemaker	P	MP
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
Stewart Stephens	JSAV	JSAV	P	DR
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

Name	Company	Representing	Voting status	Int cat
Ken Tilson	Columbus McKinnon Corp.	Columbus McKinnon Corp.	P	MP
Will Todd	Tomcat USA, Inc.	Area Four Industries	P	MP
James Tomlinson	Team Tomlinson	Team Tomlinson	O	G
Stephen Vanciel	IATSE Local 631	IATSE Local 631	O	U
Elmer Veith	Total Structures, Inc.	Eurotruss	P	MP
Steve Walker	Steve A. Walker & Associates	Steve A. Walker & Associates	P	G
Patrick Wallace	PSAV Presentation Services	PSAV Presentation Services	O	U
Mike Webb	Motion Laboratories, Inc.	Motion Laboratories, Inc.	A	MP
Charlie Weiner	Total Structures, Inc.	Eurotruss	A	MP
Michael Wells	Xtreme Structures and Fabrication	Xtreme Structures and Fabrication	P	MP
Drew Wending	PSAV Presentation Services	PSAV Presentation Services	O	DR
Marty Wesstrom	Mountain Productions Inc.	Mountain Productions Inc.	P	DR
Mike Weston	PSAV Presentation Services	PSAV Presentation Services	O	DR
Jeff Wilkowski	Thern, Inc.	Thern, 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	Ghost LX	Ghost LX	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