

Minutes
Rigging Working Group
Friday, 28 March 2014
Fort Worth Convention Center
Ft. Worth, TX

Presiding Chairman: Bill Sapsis; Sapsis Rigging, Inc.; A; U

Recording Secretaries: Karl G. Ruling; PLASA NA; exf; G & Erin Grabe; PLASA NA; exf; G

Members attending:

Matthew Antonucci; Contract Services Administration Trust Fund; P; U
William Beautyman; Limelight Productions, Inc.; P; DR
Keith Bohn; I; G
David Carmack; Columbus McKinnon Corp.; A; MP
Stu Cox; ZFX Flying Inc.; P; CP
Dan Culhane; SECOA; P; CP
Robert Dean; ZFX Flying Inc.; O; DR
Jonathan Deull; JSD Projects LLC; I; U
Brad Dittmer; Stage Labor of the Ozarks; P; U
Russ Dusek; I Weiss; P; MP
Patrick J. Finn; Sapsis Rigging, Inc.; P; U
Mike Garl; Mike Garl Consulting LLC; P; DE
Ethan William Gilson; ALPS; Advanced Lighting and Production Services; P; U
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
Pete Happe; Walt Disney Imagineering; Walt Disney Company; P; U
Herb Hart; Columbus McKinnon Corp.; P; MP
Donald Hoffend_III; Avista Designs, LLC; A; G
Joseph Jeremy; Niscon Inc.; P; CP
Christine L. Kaiser; Syracuse Scenery & Stage Lighting Co., Inc.; P; DR
Jerald Kraft; JTH Lighting Alliance; P; CP
Roger Lattin; I.A.T.S.E. Local 728; P; 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
Sam Michael; Thern, Inc.; P; MP
Steven Michelman; Entertainment Project Services, LLC; A; DE
Orestes Mihaly; Production Resource Group ; P; DR
John Miller; University of North Carolina School of the Arts; O; U
Bartholomew J. Mueller; Recreation Engineering Inc.; O; DE
Reid Neslage; H & H Specialties Inc.; P; MP
Richard J. Nix; Entertainment Structures Group; Steven Schaefer Associates; P; G
Jyle Nogee; Texas Scenic Company; A; DR
Shawn Nolan; Production Resource Group; A; DR
Kimberly Corbett Oates; Schuler Shook; P; DE
Carlos Ortega; PSAV Presentation Services; A; U
Miriam Paschetto; Geiger Engineers; P; G
Ben Peoples; Pittsburgh Hoist & Sandbag Company; O; CP
Galen Price; Blue Man Group; P; U
Woody Pyeatt; A V Pro, Inc.; P; DR
Gregory Quinkert; Motion Laboratories; A; CP
Robert Ramsey; WNP Services, Inc.; A; DR
John Ringelman; Stage Rigging, Inc.; Freeman Companies; P; DR

Members attending cont'd:

Peter A. Scheu; Scheu Consulting Services, Inc.; P; DE
Chris Schmidt; Stage Rigging, Inc.; Freeman Companies; A; DR
John C. Snook; Thermotex Industries Inc.; O; CP
Stephen G. Surratt; Texas Scenic Company; P; DR
Will Todd; Tomcat USA, Inc.; Milos Group; P; MP
Elmer Veith; Total Structures - Eastern US Sales Office; Total Structures, Inc.; A; MP
Michael Viehmeyer; James Thomas Engineering, Inc.; A; MP
Steve Walker; Steve A. Walker & Associates; P; G
Marty Wesstrom; Mountain Productions Inc.; P; DR
R. Duane Wilson; George C. Izenour Associates; P; DE

Visitors:

Lynn Snook; Thermotex Ind. Inc.;
Ken Tilson; CM

1 Opening remarks

Bill Sapsis welcomed everyone at 7:02 p.m. He thanked all the attendees for their presence.

2 Attendance and membership**2.1 Introduction of those present**

Self-introductions began counterclockwise around the table and zigzagged to attendees on the room's perimeter.

2.2 Circulation of attendance sign-in sheet

A hot-pink sign-in sheet was passed along the same route.

2.3 Call for quorum

Bill Sapsis asked for Principal voters, Alternates voting on behalf of their companies, and Individual voters to raise their hands. By counting the show of hands, Bill Sapsis announced a supermajority present.

2.4 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. However, 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.

2.5 Changes of membership status

No voters were in jeopardy of a change to Observer status due to lack of attendance.

2.6 Processing of new membership requests:

As of 28 March 2014, the following applications have been received and logged:

Russ Dusek; I Weiss; P; MP
Galen Price; Blue Man Group; P; U
Jyle Nogee; Texas Scenic Company; A; DR
Michael Viehmeyer; James Thomas Engineering, Inc.; A; MP
Joseph Champelli; Entertainment Project Services, LLC; P; DE
Chris Schmidt; Freeman; Stage Rigging Inc; A; DE
John Ringelman; Freeman; Stage Rigging Inc; A to P; DE
Steve Shaw; Levitating Productions, Inc.; P; MP
Steven Michelman; Entertainment Project Services, LLC; A; DE
Bartholomew J. Mueller; Recreation Engineering Inc.; O; DE
Sam Michael; Thern, Inc.; P; MP
Jeff Wilkowski; Thern, Inc.; A; MP

Roger Lattin moved that the applications be approved. The motion was seconded and approved by a show of hands with one abstention.

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
Woody Pyeatt	A V Pro, Inc.	P	DR
Ethan William Gilson	Advanced Lighting and Production Services	P	U
R. Duane Wilson	Amer. Society of Theatre Consultants	P	DE
Robert Young	Arup	P	DE
James Niesel	Arup	A	DE
S. Lars Klein	Arup	A	DE
Donald A. Hoffend_Jr.	Avista Designs, LLC	P	G
Donald Hoffend_III	Avista Designs, LLC	A	G
Galen Price	Blue Man Group	P	U
Ted Jones	Chicago Spotlight, Inc.	P	U
Daniel J. Clark	Clark-Reder Engineering, Inc.	P	G
Herb Hart	Columbus McKinnon Corp.	P	MP
Art Zobal	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
Edward A. (Ted) Paget	Daktronics Inc.	P	CP
Steven Ricks	Electronic Theatre Controls, Inc.	P	MP
Michael Lichter	Electronic Theatre Controls, Inc.	A	MP
Nils Becker	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
Jeremy Hochman	Full Throttle Films/ VER	P	DR
Scott M. Blair	Full Throttle Films/ VER	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

Name	Representing	Voting status	Interest category
Howard Forryan	Harting KGAA	A	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
Tray Allen	James Thomas Engineering, Inc.	P	MP
Michael Viehmeyer	James Thomas Engineering, Inc.	A	MP
Jonathan Deull	JSD Projects LLC	I	U
Jerald Kraft	JTH Lighting Alliance	P	CP
Keith Bohn	Keith Bohn	I	G
Steven C. Shaw	Levitating Productions, Inc.	P	MP
William Beautyman	Limelight Productions, Inc.	P	DR
Charlie Weiner	LMG Inc.	P	DR
Steve (BOZ) Bodzioch	LMG Inc.	A	DR
Douglas M. Eldredge	LMG Inc.	A	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
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
Joseph Jeremy	Niscon Inc.	P	CP
Tim Hansen	Oasis Stage Werks	P	DR
Eric Rouse	Pennsylvania State University	P	U
Orestes Mihaly	Production Resource Group	P	DR
Shawn Nolan	Production Resource Group	A	DR
Todd Spencer	PSAV Presentation Services	P	U
Carlos Ortega	PSAV Presentation Services	A	U
Rick Montgomery	R&M Materials Handling	P	MP
Troy Post	R&M Materials Handling	A	MP
Bruce Darden	Rigging Innovators, Inc.	P	CP
Jesse Adams	Rose Brand	P	DR

Name	Representing	Voting status	Interest category
Patrick J. Finn	Sapsis Rigging, Inc.	P	U
Bill Sapsis	Sapsis Rigging, Inc.	A	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
Brad Dittmer	Stage Labor of the Ozarks	P	U
Steve Walker	Steve A. Walker & Associates	P	G
Richard J. Nix	Steven Schaefer Associates	P	G
Kyle Kusmer	Steven Schaefer Associates	A	G
Christine L. Kaiser	Syracuse Scenery & Stage Lighting Co., Inc.	P	DR
Dana Bartholomew	Tait Towers Manufacturing LLC	P	CP
Mark Ager	Tait Towers Manufacturing LLC	A	CP
Patrick Leigh Bettington	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
Jyle Nogee	Texas Scenic Company	A	DR
Jerry Gorrell	Theatre Safety Programs	P	G
Sam Michael	Thern, Inc.	P	MP
Jeff Wilkowski	Thern, Inc.	A	MP
Adrian Forbes-Black	Total Structures Inc.	P	MP
Elmer Veith	Total Structures, Inc.	A	MP
Theresa Kelley	Total Structures Inc.	A	MP
Don Halchak	Total Structures Inc.	A	MP
Dan Lisowski	University of Wisconsin - Madison	P	U
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
Peter V. Svitavsky	Wenger Corp.	P	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
Stu Cox	ZFX Flying Inc.	P	CP

Voting Status Key: P = Principal voter, A = Alternate voter, I = Individual voter

Votes by Interest Category:		
Custom-market producer	CP	11
Designer	DE	6
Dealer or rental company	DR	13
General interest	G	9
Mass-market producer	MP	11
User	U	15
Total votes possible:		65

3 Approval of minutes from the previous meeting

See the draft minutes of the January meeting, RIGmin01-2014.pdf.

Dan Culhane moved to approve the minutes as drafted. The motion was seconded and approved by a show of hands with one abstention.

4 PLASA declarations

4.1 Reading of the NEW anti-trust statement

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

PLASA and its members take seriously their obligation to comply with all applicable antitrust laws. Therefore, during this meeting and during all PLASA 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 PLASA meeting, please bring your concern to PLASA management. An easy to read pamphlet describing the antitrust laws is available from the PLASA staff.

Nothing was reported.

4.2 Call for patents

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

PLASA intends not to publish any standard that contains protected intellectual property, unless that information can be licensed by anyone for a reasonable fee. PLASA uses a process of open patent and copyright disclosures to implement its intent. PLASA 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 or 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 reported.

5 Approval of the agenda

Michael Lichter added item 8.3, CEN standards update.

Brad Dittmer moved to approve the amended agenda. The motion was seconded and approved by a show of hands.

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)

No news or action at this time.

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

The task group is to meet on Wednesday, 26 March 2014.

Richard Nix reported that the task group met and is making good progress.

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

The task group is to meet on Thursday, 27 March 2014.

Ethan Gilson reported that the task group had met. He noted the group's excitement at continuing the work.

6.5 E1.4-3 - Hand winch rigging

Richard Nix reported that Sam Michael and Dave Carmack were added to the task group. Bill Sapsis requested to be kept in the loop as the task group initiates talks with constituents.

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

No news or action at this time.

6.6 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 at this time.

6.7 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 at this time.

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

No news or action at this time.

6.9 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 at this time.

6.10 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)

No news or action at this time.

6.11 ANSI E1.21 - 2013, Temporary Ground-Supported Overhead Structures Used To Cover Stage Areas and Support Equipment in the Production of Outdoor Entertainment Events (revision, reaffirmation, or withdrawal by 2018)

Karl Ruling reported that the standard is being included in the 2015 International Fire Code and is up for possible

adoption in NFPA 102, Standard for Grandstands, Folding and Telescopic Seating, Tents, and Membrane Structures.

6.12 BSR E1.22 - 20xx, Entertainment Technology - Fire Safety Curtain Systems (revision, reaffirmation, or withdrawal by 2014)

From the draft January minutes:

Dan Culhane reported that the task group is working on a document for consideration at the March meeting. The consensus of the group was for revision.

Dan Culhane reported that the task group has a draft document that needs to be cleaned up. It will be submitted for circulation to the group before the July meeting.

6.13 BSR E1.39 - 20xx, Entertainment Technology –Selection and Use of Personal Fall Arrest Systems on Portable Structures Used in the Entertainment Industry

6.13.1 Next public review

From the draft January minutes:

Tim Hansen moved to accept all comments addressed. The motion was seconded and passed with a unanimous show of hands. The task group was charged with modifying the draft standard so the working group can consider it and another public review at the March meeting.

See BSRE1-39-2014-3-7a.pdf, as submitted by Ethan Gilson.

Ethan Gilson reported that the task group has made the document modifications, as per the RWG decisions in January. The drawing has been updated to be clearer and details were added.

Ethan Gilson moved that the draft standard be offered for public review. The motion was seconded and approved with three abstentions. A letter ballot for the TSC's approval will be issued.

6.13.2 Response to Chris Teuber

See ResponseToTeuberObjectionsWithCMLetter.pdf.

Dan Culhane moved to accept the drafted response to Chris Teuber as the official RWG response. The motion was seconded and approved by a unanimous show of hands in favor.

6.14 BSR E1.43 - 201x, Live performer flying effect standard

Recirculated ballot closed EOD 13 March 2014. Results of the ballot will be distributed before the meeting.

Karl Ruling reported that the TSC had approved the public review. It will be offered shortly.

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

No news or action at this time.

6.16 Rigging Glossary

From the draft January minutes:

Christine Kaiser reported to the group that there will be progress on this document for this body to consider at the next meeting.

Christine Kaiser reported that progress had been made on the draft, but that it was not ready yet for review by the working group. More progress will be made into July.

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

The task group is to meet on Wednesday, 26 March 2014.

Chris Kaiser reported that the task group wants to receive comments from this working group before the draft is

offered for public review. They urged the working group to provide comments on the revised draft (E1-47_WorkingDocument03-18-20141.pdf) that was sent to this group on 20 March 2014.

Jerry Gorrell brought up the use of “method of repair” as pertains to the document. Chris Kaiser replied that “method of repair” was consensus, but that alternative language is welcome. Jerry Gorrell agreed to craft words.

6.18 BSR E1.50—Video wall project

The task group is to meet on Wednesday, 26 March 2014.

Richard Nix reported that Charlie Weiner should be back in charge of the task group in July. He noted that he feels comfortable saying that there will be something for the working group's consideration at the LDI meeting.

7 New business

7.1 Rigging point construction standard

Bill Sapsis began a discussion as to whether the working group would like to include rigging points into the E1.4 standard, write a separate document, or do nothing at all. The topics of labeling, the division between the rigging point and the structure, and live loads versus static were discussed.

Bill Sapsis asked Pete Happe, Carlos Ortega, Jonathan Deull, Chris Schmidt, and Shawn Nolan to come up with recommendations for the working group.

7.2 Other new business

There was no other new business for this body.

8 Other business and announcements

8.1 Above & Beyond Awards

Bill Sapsis reminded the group that the nomination site is open year round at tsp.plasa.org/AboveandBeyond.

8.2 TSP sessions at LDI 2014

The TSP is currently accepting content to fill both the 90-minute educational sessions and in-booth presentations. The deadline for title, abstract, moderator, and panelist information is 10 April 2014.

Erin Grabe reported on the email for content that was sent to the working group members. Ideas are due ASAP.

8.3 CEN standards update

Michael Lichter reported on the formation of CEN TC 433, "Entertainment technology – Equipment, technical installations and machinery used on stages and other production areas within the entertainment industry." The delegation is by country, with one to three people per country. The first project is to work on CWA 15902-1, Lifting and Load-bearing Equipment for Stages and other Production Areas within the Entertainment Industry - Part 1: General requirements (excluding aluminium and steel trusses and towers), and changing it to an EN standard.

8.4 Rocky Paulson

Bill Sapsis reported that Rocky Paulson's wife is doing well.

8.5 Charlie Weiner

Bill Sapsis reported that Charlie Weiner's wife is doing well, too.

9 Schedule for future meetings

The next meeting will take place Thursday, 24 July 2014, from 7:00 to 11:00 p.m., at the Marriott Solana in Westlake, TX. Please check <http://na.plasa.org/news/meetings.php> for the most up-to-date schedule information.

10 Adjournment

Keith Bohn moved to adjourn. The motion was seconded. Hearing no objections, Bill Sapsis declared the meeting adjourned at 8:08 p.m.

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
Tray Allen	James Thomas Engineering, Inc.	James Thomas Engineering, Inc.	P	MP
Frank Allison	Frank Allison	Frank Allison	O	G
Matthew Antonucci	Contract Services Administration Trust Fund	Contract Services Administration Trust Fund	P	U
Brent Armstong	Brent Armstong	Brent Armstong	O	U
John Van Arsdale	University of Wisconsin - Madison	University of Wisconsin - Madison	O	U
William Ian Auld	Auld Entertainment	Auld Entertainment	O	U
Warren A. Bacon	Warren A. Bacon	Warren A. Bacon	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
Dana Bartholomew	Fisher Technical Services	Tait Towers Manufacturing LLC	P	CP
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
Nils Becker	Electronic Theatre Controls, Inc.	Electronic Theatre Controls, Inc.	A	MP
Maria Bement	MGM Grand	MGM Grand	O	U
Patrick Leigh Bettington	Stage Technologies	Tait Towers Manufacturing LLC	A	CP
Roy Bickel	Roy Bickel	Roy Bickel	O	G
Scott M. Blair	Full Throttle Films/ VER	Full Throttle Films/ VER	A	DR
Lee J. Bloch	Bloch Design Group, Inc.	Bloch Design Group, Inc.	O	G
Steve (BOZ) Bodzioch	LMG Inc.	LMG Inc.	A	DR
Keith Bohn	Keith Bohn	Keith Bohn	I	G

Name	Company	Representing	Voting status	Int. Cat.
Ron Bonner	PLASA Technical Resources Office	PLASA EU	O	G
William Bradburn	Aerial Arts, Inc.	Aerial Arts, Inc.	O	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
David Carmack	Columbus McKinnon Corp.	Columbus McKinnon Corp.	A	MP
Michael J. Carnaby	Mikan Theatricals	Mikan Theatricals	O	DR
Joseph Champelli	Entertainment Project Services, LLC	Entertainment Project Services, LLC	P	DE
Daniel J. Clark	Clark-Reder Engineering, Inc.	Clark-Reder Engineering, Inc.	P	G
Benjamin Cohen	Reed Rigging, Inc.	Reed Rigging, Inc.	O	DR
Ian Coles	Total Structures, Inc.	Total Structures, Inc.	O	MP
Gregory C. Collis	I.A.T.S.E. Local 16	I.A.T.S.E. Local 16	O	G
Stu Cox	ZFX Flying Inc.	ZFX Flying Inc.	P	CP
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
Robert Dean	ZFX Flying Inc.	ZFX Flying Inc.	O	DR
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

Name	Company	Representing	Voting status	Int. Cat.
Noga Eilon-Bahar	Eilon Engineering Industrial Weighing Systems	Eilon Engineering Industrial Weighing Systems	O	MP
Douglas M. Eldredge	LMG Inc.	LMG Inc.	A	DR
James B. Evans	Mountain Productions Inc.	Mountain Productions Inc.	O	DR
Patrick J. Finn	Sapsis Rigging, Inc.	Sapsis Rigging, Inc.	P	U
Adrian Forbes-Black	Total Structures, Inc.	Total Structures Inc.	P	MP
Howard Forryan	Harting Ltd.	Harting KGAA	A	G
Tim Franklin	Theta-Consulting	Theta-Consulting	O	G
Luca Galante	Alfa System Sas	Alfa System Sas	O	CP
Mike Garl	Mike Garl Consulting LLC	Mike Garl Consulting LLC	P	DE
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
Jay O. Glerum	Jay O. Glerum & Associates, Inc.	Jay O. Glerum & Associates, Inc.	O	U
Rand Goddard	W.E. Palmer Co.	W.E. Palmer Co.	O	CP
Reuben Goldberg	Technic Services	Technic Services	O	U
William B. Gorlin	McLaren Engineering Group	M.G. McLaren, P.C.	P	G
Jerry Gorrell	Theatre Safety Programs	Theatre Safety Programs	P	G
Erin Grabe	PLASA NA	PLASA NA	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
Don Halchak	Total Structures Inc.	Total Structures Inc.	A	MP
Rod Haney	I.A.T.S.E. Local 891	I.A.T.S.E. Local 891	P	U

Name	Company	Representing	Voting status	Int. Cat.
Tim Hansen	Oasis Stage Werks	Oasis Stage Werks	P	DR
Pete Happe	Walt Disney Imagineering	Walt Disney Company	P	U
Sean Harding	High Output, Inc.	High Output, Inc.	O	G
Greg Hareld	Kleege Industries	Kleege Industries	O	U
Dean Hart	Stage Rigging, Inc.	Freeman Companies	O	U
Herb Hart	Columbus McKinnon Corp.	Columbus McKinnon Corp.	P	MP
Marc Hendriks	Prolyte	Prolyte	O	MP
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	P	DR
Daniel Lynn Houser	Real Rigging Solutions, LLC	Real Rigging Solutions, LLC	O	U
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.	Niscon Inc.	P	CP
Peter Johns	Total Structures, Inc.	Total Structures, Inc.	O	MP
Scott Johnson	Tomcat USA, Inc.	Milos Group	A	MP
Ted Jones	Chicago Spotlight, Inc.	Chicago Spotlight, Inc.	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
John Kaes	John Kaes	John Kaes	O	U
Christine L. Kaiser	Syracuse Scenery & Stage Lighting Co., Inc.	Syracuse Scenery & Stage Lighting Co., Inc.	P	DR

Name	Company	Representing	Voting status	Int. Cat.
JoAnna Kamorin-Lloyd	Vincent Lighting Systems	Vincent Lighting Systems	O	U
Theresa Kelley	Total Structures, Inc.	Total Structures Inc.	A	MP
Nevin Kleege	Kleege Industries	Kleege Industries	O	U
S. Lars Klein	Arup	Arup	A	DE
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	A	G
Ken Lager	Pook, Diemont & Ohl, Inc.	Pook, Diemont & Ohl, Inc.	O	DR
Jon Lagerquist	South Coast Repertory	South Coast Repertory	O	U
Roger Lattin	I.A.T.S.E. Local 728	I.A.T.S.E. Local 728	P	U
Eugene Leitermann	Theatre Projects Consultants, Inc.	Theatre Projects Consultants, Inc.	O	G
Jon Lenard	Applied Electronics	Applied Electronics	O	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
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
Gary Mardling	Kish Rigging	Kish Rigging	O	DR
Chuck McClelland	Jeamar Winches Inc.	Jeamar Winches Inc.	O	MP
Joseph McGeough	Flying by Foy	Foy Invenerprises, Inc.	P	CP
Bob McVay	Schuler Shook	Schuler Shook	A	DE

Name	Company	Representing	Voting status	Int. Cat.
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
Scott Mohr	R&R Cases and Cabinets	R&R Cases and Cabinets	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
John "Andrew" Munro	animaenagerie	animaenagerie	O	U
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
James Niesel	Arup	Arup	A	DE
Richard J. Nix	Entertainment Structures Group	Steven Schaefer Associates	P	G
Jyle Nogee	Texas Scenic Company	Texas Scenic Company	A	DR
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

Name	Company	Representing	Voting status	Int. Cat.
Carlos Ortega	PSAV Presentation Services	PSAV Presentation Services	A	U
Gregory Orth	WNP Services, Inc.	WNP Services, Inc.	P	DR
Edward A. (Ted) Paget	Daktronics Automated Rigging Solutions	Daktronics Inc.	P	CP
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
Ben Peoples	Pittsburgh Hoist & Sandbag Company	Pittsburgh Hoist & Sandbag Company	O	CP
G. Anthony Phillips	I.A.T.S.E. Local 16	I.A.T.S.E. Local 16	O	U
Philip J. Piszczak	The National Telephone Supply Company	The National Telephone Supply Company	O	G
Troy Post	R&M Materials Handling	R&M Materials Handling	A	MP
Kurt Pragman	Pragman Associates, LLC	Pragman Associates, LLC	O	G
Galen Price	Blue Man Group	Blue Man Group	P	U
Woody Pyeatt	A V Pro, Inc.	A V Pro, Inc.	P	DR
Gregory Quinkert	Motion Laboratories	Motion Laboratories	A	CP
Robert Ramsey	WNP Services, Inc.	WNP Services, Inc.	A	DR
Michael Reed	Reed Rigging, Inc.	Reed Rigging, Inc.	O	DR
Steven Ricks	Electronic Theatre Controls, Inc.	Electronic Theatre Controls, Inc.	P	MP
Mark Riddlesperger	LA ProPoint, Inc.	LA ProPoint, Inc.	O	CP
John Ringelman	Stage Rigging, Inc.	Freeman Companies	P	DR
Timo Risku	Akumek	Akumek	O	DE
Rick Rosas	Texas Scenic Company	Texas Scenic Company	A	DR
Eric Rouse	Pennsylvania State University	Pennsylvania State University	P	U
Karl G. Ruling	PLASA NA	PLASA NA	exf	G
Bill Sapsis	Sapsis Rigging, Inc.	Sapsis Rigging, Inc.	A	U
Peter A. Scheu	Scheu Consulting Services, Inc.	Scheu Consulting Services, Inc.	P	DE

Name	Company	Representing	Voting status	Int. Cat.
Chris Schmidt	Stage Rigging, Inc.	Freeman Companies	A	DR
Peter "Punch" Christian Schmidtke	Hollywood Lighting Services, Inc.	Hollywood Lighting, Inc.	O	DR
Steven C. Shaw	Levitating Productions, Inc.	Levitating Productions, Inc.	P	MP
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.	O	CP
Todd Spencer	PSAV Presentation Services	PSAV Presentation Services	P	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
Joachim Stoecker	CAMCO GmbH	CAMCO GmbH	O	MP
Stephen G. Surratt	Texas Scenic Company	Texas Scenic Company	P	DR
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
Will Todd	Tomcat USA, Inc.	Milos Group	P	MP
Stephen Vanciel	Stephen Vanciel	Stephen Vanciel	O	U
Elmer Veith	Total Structures - Eastern US Sales Office	Total Structures, Inc.	A	MP
Michael Viehmeyer	James Thomas Engineering, Inc.	James Thomas Engineering, Inc.	A	MP
Steve Walker	Steve A. Walker & Associates	Steve A. Walker & Associates	P	G
Charlie Weiner	LMG Inc.	LMG Inc.	P	DR
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

Name	Company	Representing	Voting status	Int. Cat.
R. Duane Wilson	George C. Izenour Associates	Amer. Society of Theatre Consultants	P	DE
Jiantong Wu	Beijing Special Engineering Design & Research Institute	Beijing Special Engineering Design & Research Institute	O	G
Robert Young	Arup	Arup	P	DE
Art Zobal	Columbus McKinnon Corp.	Columbus McKinnon Corp.	A	MP

Voting Status Key:

P = Principal voter, A = Alternate voter, I = Individual voter, O = Observer member

Interest Category Key:

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