

Minutes
Rigging Working Group
Thursday, 01 August 2013
D/FW Marriott Solana
Westlake, TX

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

Recording secretaries: Karl G. Ruling & Erin Grabe; PLASA

Members attending:

Woody Pyeatt; A V Pro, Inc.; P; DR
R. Duane Wilson; George C. Izenour Associates, representing ASTC; P; DE
David Bond; Arcofab; P; U
Robert Young; Arup; P; DE
Herb Hart; Columbus McKinnon Corp.; P; MP
Art Zobal; Columbus McKinnon Corp.; A; MP
David Carmack; Columbus McKinnon Corp.; A; MP
Matthew Antonucci; Contract Services Administration Trust Fund; P; U
Edward A. (Ted) Paget; Daktronics Automated Rigging Solutions (Daktronics Inc.); P; CP
Joseph McGeough; Flying by Foy (Foy Invenenterprises, Inc.); P; CP
John Ringelman; Stage Rigging, Inc. (Freeman Companies); A; DR
Reid Neslage; H & H Specialties Inc.; P; MP
Tracy Nunnally; Hall Associates Flying Effects; P; CP
Ed Garstkiewicz; Harting Inc., North America (Harting KGAA); P; G
Roger Lattin; I.A.T.S.E. Local 728; P; U
Rod Haney; I.A.T.S.E. Local 891; P; U
Charlie Weiner; LMG Inc.; P; DR
Keith Bohn; Tomcat USA, Inc. (Milos Group); P; MP
Will Todd; Tomcat USA, Inc. (Milos Group); A; MP
Peter Herrmann; Motion Laboratories; A; CP
Ben Peoples; Pittsburgh Hoist & Sandbag Company; O; CP
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
Kimberly Corbett Oates; Schuler Shook; P; 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; Entertainment Structures Group (Steven Schaefer Associates); P; G
Christine L. Kaiser; Syracuse Scenery & Stage Lighting Co., Inc.; P; DR
Dana Bartholomew; Fisher Technical Services, Inc. (Tait Towers Manufacturing LLC); P; CP
Mark Ager; Stage Technologies (Tait Towers Manufacturing LLC); A; CP
Stephen G. Surratt; Texas Scenic Company; P; DR
Jyle Nogee; Theatre Design Services, LLC.; I; DE
Jerry Gorrell; Theatre Safety Programs; P; G
Elmer Veith; Total Structures - Eastern US Sales Office (Total Structures, Inc.); A; MP
Dan Lisowski; Dept. Of Theatre and Drama, University of Wisconsin - Madison; P; U
Earle T. Greene; Walt Disney Parks and Creative Entertainment (Walt Disney Company); A; U
Peter V. Svitavsky; J.R. Clancy Inc. (Wenger Corp.); P; CP
Joseph Champelli; ZFX Flying Inc.; P; CP

Visitors: None signed the sign-in sheet.

1 Opening remarks

Bill Sapsis called the meeting to order at 13:02. He thanked all for attending and mentioned that these meetings are important and that the work being done is very appreciated.

2 Attendance and membership

2.1 Introduction of those present

Self-introductions took place counterclockwise.

2.2 Circulation of attendance sign-in sheet

A lime green sign-in sheet was passed clockwise.

2.3 Call for quorum

Voters raised a hand and were counted. Bill announced that more than the minimum for a quorum was present.

2.4 Requirements for membership

The following statement was read aloud 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 resulting from lack of attendance.

The following voters and their alternates have missed the last two consecutive meetings, and will be moved to observer status if they miss this one:

Robert Young; ARUP; DE; P
James Neisel; ARUP; DE; A
Vincent Cannavale; Motion Laboratories; CP; P
Peter Hermann; Motion Laboratories; CP; A
David Hermann; Motion Laboratories; CP; A
Gregory Quinkert; Motion Laboratories; CP; A
Joseph Jeremy; Niscon, Inc.; CP; P-- Not present
Bruce Darden; Rigging Innovators, Inc.; CP; P-- Not present
Adrian Forbes-Black; Total Structures; MP; P
Elmer Veith; Total Structures; MP; A
Theresa Kelley; Total Structures; MP; A
Kandie Koed; Total Structures; MP; A

Of these, only Joseph Jeremy (Niscon, Inc.) and Bruce Darden (Rigging Innovators) were not present and had no alternate present. Bill Sapsis announced that they were moved to observer status.

2.6 Processing of new membership requests:

The following applications were received:

Jyle Nogee; Theatre Design Services, LLC; I; DE
S. Lars Klein; ARUP; A; DE
Carlos Ortega; PSAV; A; U
Jerald Kraft; JTH Lighting Alliance; P; CP
Matthew Antonucci; Contract Services Administration Trust Fund; P; U
Douglas Eldredge; LMG; A; DE

Ben Peoples; Pittsburgh Hoist & Sandbag Co.; O; CP
 Steven Shaw; Performance Rigging Systems; P; MP

Richard Nix moved that the applications be accepted, except that Steven Shaw and Jerald Kraft be accepted as observer members due to their not being present at this meeting. The motion was seconded and then approved with a unanimous show of hands.

Tracy Nunnally asked to be moved back to principal voting status. Ted Paget made the motion, which was seconded. The motion was approved with a show of hands.

Bill Sapsis noted that Fisher Technical Services and Stage Technologies are both now owned by Tait Towers Manufacturing LLC. Dana Bartholomew will be the principal voter, and the others alternates.

2.7 Consensus body

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

Name	Representing	Voting status	Int. cat.
Woody Pyeatt	A V Pro, Inc.	P	DR
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
David Bond	Arcofab	P	U
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
Herb Hart	Columbus McKinnon Corp.	P	MP
Shawn Sack	Columbus McKinnon Corp.	A	MP
Art Zobal	Columbus McKinnon Corp.	A	MP
David Carmack	Columbus McKinnon Corp.	A	MP
Matthew Antonucci	Contract Services Administration Trust Fund	P	U
Edward A. (Ted) Paget	Daktronics Inc.	P	CP
Michael Lichter	Electronic Theatre Controls, Inc.	P	MP
Nils Becker	Electronic Theatre Controls, Inc.	A	MP
Joseph McGeough	Foy Invention Enterprises, Inc.	P	CP
Rocky Paulson	Freeman Companies	P	DR
John Ringelman	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
Ed Garstkiewicz	Harting KGAA	P	G

Name	Representing	Voting status	Int. cat.
Howard Forryan	Harting KGAA	A	G
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
John (Jack) Miller	I Weiss	P	CP
Tray Allen	James Thomas Engineering, Inc.	P	MP
Jonathan Deull	JSD Projects LLC	I	U
William Beautyman	Limelight Productions, Inc.	P	DR
Charlie Weiner	LMG Inc.	P	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
Keith Bohn	Milos Group	P	MP
Will Todd	Milos Group	A	MP
Mike Garl	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
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
Jesse Adams	Rose Brand	P	DR
Bill Sapsis	Sapsis Rigging, Inc.	P	U
Peter A. Scheu	Scheu Consulting Services, Inc.	P	G
Kimberly Corbett Oates	Schuler Shook	P	DE
Joshua Grossman	Schuler Shook	A	DE
Dan Culhane	SECOA	P	CP
Brad Dittmer	Stage Labor of the Ozarks	P	U

Name	Representing	Voting status	Int. cat.
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	Theatre Design Services, LLC.	I	DE
Jerry Gorrell	Theatre Safety Programs	P	G
Jeff Wilkowski	Thern, Inc.	P	MP
Adrian Forbes-Black	Total Structures Inc.	P	MP
Elmer Veith	Total Structures, Inc.	A	MP
Theresa Kelley	Total Structures Inc.	A	MP
Dan Lisowski	University of Wisconsin - Madison	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
Rodney F. Kaiser	Wenger Corp.	A	CP
Michael Wells	Xtreme Structures and Fabrication	P	MP
Mark Newlin	Xtreme Structures and Fabrication	A	MP
Joseph Champelli	ZFX Flying Inc.	P	CP
Stu Cox	ZFX Flying Inc.	A	CP
	Total votes possible	54	
Votes by interest category:		9	CP
CP, Custom-market producer		4	DE
DE, Designer		10	DR
DR, Dealer or Rental Company		8	G
G, General interest		9	MP
MP, Mass-market producer		14	U
U, User			

3 Approval of minutes from the previous meeting

See the draft minutes of the 22 March 2013 meeting, *RIGmin03-2013.pdf*.

A minor change was made to 7.1 per R. Duane Wilson: "rigging committee" changed to "code committee".

Ted Paget moved that we approve the draft minutes as amended. The motion was seconded and approved by a unanimous show of hands.

4 PLASA declarations

4.1 Anti-trust statement

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

The PLASA Board of Directors, the Technical Standards Council, and the leadership of this working group will reject or nullify any actions that unlawfully restrain trade. Anyone who feels that such an action is being or has been taken is requested to bring that matter to the attention of the chair immediately. Anyone who feels that actions in restraint of trade have been taken and not properly annulled is requested to notify the TSC chair or PLASA chair immediately.

PLASA legal counsel has informed us that violations of the anti-trust laws can have serious consequences. Individuals engaged in certain unlawful conduct can be found criminally liable. An individual convicted of a criminal violation of the Sherman Act may be fined as much as \$1,000,000 and imprisoned for up to ten years. An easy to read pamphlet describing restraint of trade issues is available from the Technical Standards Manager.

Erin Grabe held up a copy of the pamphlet.

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

Dan Culhane moved to approve the agenda. The motion was seconded and approved by a unanimous show of hands

6 Old business

6.1 ANSI E1.1 - 2012, wire rope ladders

No news or action.

6.2 ANSI E1.2 - 2012, Entertainment Technology - Design, Manufacture and Use of Aluminum Trusses and Towers

No news or action.

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

The PINS is filed and the notice has been published. Next step was a vote for public review of a revised standard. Do we have a revised standard?

Richard Nix moved that the revised draft standard be offered for public review. The motion was seconded. There was discussion of some of the changes, and further changes were made to the draft document, creating an r1 version.

Richard Nix modified his motion to move that the revised draft standard (Rig/2013-2026r1) be accepted as an American National Standard (ANS) by letter ballot vote with a concurrent public review. The motion was seconded, and then approved with a show of hands, with all voting Yes, except for one No vote. There were no abstentions. The ANS acceptance question will be decided by letter ballot.

6.4 ANSI E1.6-1 - 2012, Entertainment Technology--Powered Hoist Systems

No news or action.

6.5 ANSI E1.6-2 - 2013, Entertainment Technology--Design, Inspection, and Maintenance of Electric Chain Hoists for the Entertainment Industry

It's published, Karl Ruling reported.

6.6 ANSI E1.6-3 - 2012, Safe Use of Electric Chain Hoists in the Entertainment Industry

No news or action.

6.7 BSR E1.6-4, Control of Electric Chain Hoists in the Entertainment Industry

The document was in public review until the end of the day on 07 July. Comments received?

Peter Herrmann had submitted a proposed comment resolution document, which was distributed to the working group only a few days before the meeting. There was no objection to considering the proposed resolutions, despite the late submission.

Peter Herrmann noted that all the comments were for grammar and spelling. He then moved that the group accept the comment resolutions. The motion was seconded and approved by a show of hands with one abstention. This was a supermajority.

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

6.8 ANSI E1.8 - 2012, Entertainment Technology--Loudspeaker Enclosures Intended for Overhead Suspension--Classification, Manufacture and Structural Testing

No news or action.

6.9 ANSI E1.15 - 2006 (R2011), Entertainment Technology--Recommended Practices and Guidelines for the Assembly and Use of Theatrical Boom & Base Assemblies

No news or action.

6.10 BSR E1.21 - 201x, Temporary Ground-Supported Overhead Structures Used To Cover Stage Areas and Support Equipment in the Production of Outdoor Entertainment Events

Update on public review comments and possible resolutions.

Keith Bohn reported on the latest public review and comment resolutions. He then moved to accept the comment resolutions. The motion was seconded and approved by show of hands with three abstentions.

Keith Bohn moved that we accept the revised document as an ANS. The motion was seconded and will be decided by letter ballot.

6.11 ANSI E1.22 - 2009, Entertainment Technology - Fire Safety Curtain Systems

The task group is meeting later tonight. Is there a recommendation for action at this time?

No recommendation at this time. The task group will be meeting at 19:00, said Dan Culhane.

There was a brief discussion of making it more prescriptive rather than performance-based.

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

The document was in public review until the end of the day on 07 July. Comments received?

Bill Sapsis reported that he has appointed Ethan Gilson as the new task group leader to replace Rocky Paulson, who has had to withdraw for personal reasons. A set of draft comment resolutions is to be expected soon.

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

From the draft March minutes:

Dan Lisowski reported the hours the group had worked on a first draft suitable for public review.

An updated version of the document will be sent to the RWG with a request for comments.

Those comments will be considered during the August meetings.

Task group report?

Dan Lisowski reported that there are two task group meetings coming up. No document was ready for this meeting, but the task group plans to have a document ready for discussion, but not public review, at the November meeting.

6.14 BSR E1.44 – 201x, Common Show File Exchange Format for Entertainment Industry Automation Control Systems -- Stage Machinery

Public review ended April 1. Comment resolutions have been drafted and distributed. Next steps?

Ted Paget reported on the status of this draft. He then moved that the comment resolutions be accepted. The motion was seconded. There was discussion of section 5.3.1.2.5 and the associated resolutions in which text was modified. The motion was amended to refer to the modified resolutions and draft standard. The motion was approved by a show of hands, with all voting Yes except for one abstention.

Ted Paget moved that the draft standard be offered for public review. The motion was seconded and then approved by a show of hands.

6.15 Rigging Glossary

From the draft March minutes:

There was a discussion of a way forward for this group, how to integrate checking for consistent use of words into our process. "The Word Police" was suggested as title no one likes. There was a discussion of a possible future standard that would be a recommended guide to the language used in documents.

Update?

Chris Kaiser reported that there has been no significant work since the last meeting. The task group has been busy with other projects and life, but will have something for the next meeting.

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

From the draft March minutes:

Pete Svitavsky is appointed as the task group leader by Bill Sapsis, replacing Chris Kaiser.

Chris Kaiser suggested that a complete draft will be ready for review by the working group at the January 2014 meeting.

Update? The task group meets August 2.

Pete Svitavsky said that the task group is making progress and may have a draft for the January meeting.

Chris Kaiser reported that the group had identified 68 companies that do theatrical rigging inspections. Of those 68, 65 were contacted and 25 responded with interest. In total, 19 reports were received, and after redacting the identifying material they were circulated to the task group. Kaiser said that it was really helpful to have that material to work with. Chris Kaiser's report was positively received by the working group.

Todd Spencer asked if rigging points for chain hoists, et cetera, are included in the standard. There was discussion.

7 New business

7.1 Video wall project

See CharlieWeiner_TSP_ProjectRequest LED Walls.pdf.

Charlie Weiner spoke on this project.

Bill Sapsis appointed Tray Allen, David Bond, Ted Paget, Richard Nix, Steve Walker, Jeff Reder, Doug Elderage, Charlie Weiner, & Will Todd to develop a scope statement with which to present to the group.

The structure of the video walls and the rigging of them were identified as two separate but interrelated issues.

7.2 Hand winches or hoists

Chris Kaiser asked about a standard for hand winches or hoists. Sapsis suggested that Chris Kaiser submit a proposal, if she wishes—or anyone else wishes.

7.3 Dead-hung rigging

Woody Pyeatt said that we don't have a standard for dead-hung rigging and asked if the group should consider a standard like this. It was noted that Roger Lattin has previously asked this question. Bill Sapsis is skeptical that this group has the person-power to take on this project, but noted that there is a need. He said he would entertain a proposal from anyone that wished to submit one

8 Other business and announcements

8.1 NVBF NA 149-00-05 AA Maschinen

From the draft March minutes:

Lichter reported that there is work being done to create a pan-European CEN standard for rigging and stage machinery to replace the workshop agreement. Ron Bonner has put forth a work item on this with BSI.

Update?

Mark Ager gave the group a little background regarding both BSI and DIN seeking to push competing standards through as an EN; He noted that the European community is at a disagreement over one brake or two and that very little information is being disseminated by BSI or DIN because of the competition.

8.2 Update on the Event Safety Alliance and the Event Safety Guide

From the draft March minutes:

Jim Digby reported that parts of The Event Safety Guide are in public review. The rigging chapter is not finished, but will be put out for review when available. He encouraged the group to download the document and get involved with this effort. The website from which the document can be downloaded is <http://www.eventsafetyalliance.org/>.

Update?

Bill Sapsis reiterated the need for this group to be supportive of the effort of the ESA; noting that it helps the community at large and this group. It was also noted that there is a parallel group in New Zealand and Australia and that there is interest in this topic in Singapore, too.

9 Schedule for future meetings

Bill Sapsis announced that the next meeting is scheduled for Wednesday 20 November, between 19:00 and 23:00 at the Las Vegas Hotel.

10 Adjournment

Ted Paget moved that the meeting adjourn. The motion was seconded. Hearing no objections, Bill Sapsis declared the meeting adjourned at 16:37.

Membership and Contact Information as of 6 August 2013

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, Inc.	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 Group Ltd.	Tait Towers Manufacturing LLC	A	CP
Roy Bickel	Roy Bickel	Roy Bickel	O	G
Lee J. Bloch	Bloch Design Group, Inc.	Bloch Design Group, Inc.	O	G
Steve (BOZ) Bodzioch	LMG Inc.	LMG Inc.	O	G
Keith Bohn	Tomcat USA, Inc.	Milos Group	P	MP
David Bond	Arcofab	Arcofab	P	U
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

Name	Company	Representing	Voting status	Int. cat.
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	ZFX Flying Inc.	ZFX Flying Inc.	P	CP
Daniel J. Clark	Clark-Reder Engineering, Inc.	Clark-Reder Engineering, Inc.	O	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.	A	CP
Dan Culhane	SECOA	SECOA	P	CP
Bruce Darden	Rigging Innovators, Inc.	Rigging Innovators, Inc.	O	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
Cristina Delboni	Feeling Structures	Feeling Structures	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
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
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	Tomcat USA, Inc.	Milos Group	A	MP
Ed Garstkiewicz	Harting Inc., North America	Harting KGAA	P	G

Name	Company	Representing	Voting status	Int. cat.
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
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	Mainstage Theatrical Supply, Inc.	Mainstage Theatrical Supply	O	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	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
Daniel Lynn Houser	Real Rigging Solutions, LLC	Real Rigging Solutions, LLC	O	U
Donald Hoffend_III	Avista Designs, LLC	Avista Designs, LLC	A	G
Wes Jenkins	Down Stage Right Industries	Down Stage Right Industries	O	CP
Joseph Jeremy	Niscon Inc.	Niscon Inc.	O	CP
Peter Johns	Total Structures, Inc.	Total Structures, Inc.	O	MP
Ted Jones	Chicago Spotlight, Inc.	Chicago Spotlight, Inc.	O	U
Kent H. Jorgensen	IATSE Local 80	IATSE Local 80	O	G

Name	Company	Representing	Voting status	Int. cat.
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
Rodney F. Kaiser	J.R. Clancy Inc.	Wenger Corp.	A	CP
Christine L. Kaiser	Syracuse Scenery & Stage Lighting Co., Inc.	Syracuse Scenery & Stage Lighting Co., Inc.	P	DR
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	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	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.	P	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 Invenrprises, Inc.	P	CP
Richard C. Mecke	Texas Scenic Company	Texas Scenic Company	O	DR

Name	Company	Representing	Voting status	Int. cat.
Orestes Mihaly	Production Resource Group	Production Resource Group	P	DR
Hank Miller	W.E. Palmer Co.	W.E. Palmer Co.	O	CP
John (Jack) Miller	I Weiss	I Weiss	P	CP
Jeff T. Miller	Worldwide Standards and Auditing	Walt Disney Company	A	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 "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	Theatre Design Services, LLC.	Theatre Design Services, LLC.	I	DE
Shawn Nolan	Production Resource Group	Production Resource Group	A	DR
Tracy Nunnally	Hall Associates Flying Effects	Hall Associates Flying Effects	P	CP
Kimberly Corbett Oates	Schuler Shook	Schuler Shook	P	DE
Carlos Ortega	PSAV Presentation Services	PSAV Presentation Services	A	U
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	P	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
Michael Powers	Central Lighting & Equipment, Inc.	Central Lighting & Equipment, Inc.	O	DR
Kurt Pragman	Pragman Associates, LLC	Pragman Associates, LLC	O	G

Name	Company	Representing	Voting status	Int. cat.
Woody Pyeatt	A V Pro, Inc.	A V Pro, Inc.	P	DR
Gregory Quinkert	Motion Laboratories	Motion Laboratories	A	CP
Michael Reed	Reed Rigging, Inc.	Reed Rigging, Inc.	O	DR
Mark Riddlesperger	LA ProPoint, Inc.	LA ProPoint, Inc.	O	CP
John Ringelman	Stage Rigging, Inc.	Freeman Companies	A	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
Shawn Sack	Columbus McKinnon Corp.	Columbus McKinnon Corp.	A	MP
Bill Sapsis	Sapsis Rigging, Inc.	Sapsis Rigging, Inc.	P	U
Peter A. Scheu	Scheu Consulting Services, Inc.	Scheu Consulting Services, Inc.	P	G
Peter "Punch" Christian Schmidtke	Hollywood Lighting Services, Inc.	Hollywood Lighting, Inc.	O	DR
Steven C. Shaw	Performance Rigging Systems, Inc.	Performance Rigging Systems, Inc.	O	MP
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
Will Todd	Tomcat USA, Inc.	Milos Group	A	MP
Stephen Vanciel	Stephen Vanciel	Stephen Vanciel	O	U
Elmer Veith	Total Structures - Eastern US Sales Office	Total Structures, Inc.	A	MP
Steve Walker	Steve A. Walker & Associates	Steve A. Walker & Associates	P	G
Charlie Weiner	LMG Inc.	LMG Inc.	P	DR
Michael Wells	Xtreme Structures and Fabrication	Xtreme Structures and Fabrication	P	MP

Name	Company	Representing	Voting status	Int. cat.
Marty Wesstrom	Mountain Productions Inc.	Mountain Productions Inc.	P	DR
Jeff Wilkowski	Them, Inc.	Them, Inc.	P	MP
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		Interest Category	
P	Principal voting member	CP	Custom-market Producer
A	Alternate voting member	MP	Mass-market Producer
I	Individual voting member	DE	DEsigner
O	Observer non-voting member	DR	Dealer/Rental company
		U	User
		G	General interest