

Minutes
Rigging Working Group
Friday, 22 March 2013
Hyatt Regency Milwaukee
Milwaukee, WI

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

Recording secretary: Karl G. Ruling; PLASA

Members attending:

Woody Pyeatt; A V Pro, Inc.; P; DR
Baer Long; Ninja Rigging (Act 1 Rigging Inc.); O; G
Ethan William Gilson; Advanced Lighting and Production Services; P; U
William Bradburn; Aerial Arts, Inc.; P; U
Steven C. Shaw; Performance Rigging Systems (Aerial Rigging); P; DR
Wendy Holt; AMPTP/CSATF (Alliance of Motion Picture and Television Producers); P; G
R. Duane Wilson; George C. Izenour Associates (Amer. Society of Theatre Consultants); P; DE
David Bond; Arcofab; P; U
Donald Hoffend_III; Avista Designs, LLC; A; G
Art Zobal; Columbus McKinnon Corp.; A; MP
David Carmack; Columbus McKinnon Corp.; A; MP
Edward A. (Ted) Paget; Daktronics Automated Rigging Solutions (Daktronics Inc.); P; CP
Nils Becker; Electronic Theater Controls; A; MP
Michael Lichter; Electronic Theatre Controls, Inc.; P; MP
Dana Bartholomew; Fisher Technical Services, Inc.; P; CP
Joseph McGeough; Flying by Foy (Foy Inventerprises Inc.); P; CP
Rocky Paulson; Stage Rigging, Inc. (Freeman Companies); P; DR
John Ringelman; Stage Rigging, Inc. (Freeman Companies); A; DR
Reid Neslage; H & H Specialties Inc.; P; MP
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
Jim Digby; The Collaborative Endeavor Group; Linkin Park Touring/The Collective; O; U
Mike Adamovich; McLaren Engineering Group (M.G. McLaren), P.C.; A; G
Keith Bohn; Tomcat USA, Inc. (Milos Group); P; MP
Will Todd; Tomcat USA, Inc. (Milos Group); A; MP
Marty Wesstrom; Mountain Productions Inc.; P; DR
Tim Hansen; Oasis Stage Werks; P; DR
Eric Rouse; Pennsylvania State University; P; U
Erin Grabe; PLASA NA; ex officio
Orestes Mihaly; Production Resource Group ; P; DR
Shawn Nolan; Production Resource Group; A; DR
Todd Spencer; PSAV Presentation Services; P; U
Jesse Adams; Rose Brand; P; DR
Bill Sapsis; Sapsis Rigging, Inc.; P; U
Peter A. Scheu; Scheu Consulting Services, Inc.; P; G
Kimberly Corbett; Schuler Shook; P; DE

Dan Culhane; SECOA; P; CP
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
Stephen G. Surratt; Texas Scenic Company; P; DR
Jerry Gorrell; Theatre Safety Programs; P; G
Dan Lisowski; Dept. Of Theatre and Drama (University of Wisconsin - Madison); P; U
John Van Arsdale; University of Wisconsin - Madison; O; U
Pete Happe; Walt Disney Imagineering (Walt Disney Company) 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:

Harvey Sweet
Karl-Heinz Mittelstaedt; Staatstheater Stuttgart; German Theater Technical Assc.
Ulrich Kunkel; E3 Engineering; DIN German Standards Assc.
Don Halchak; Total Structures, Inc.
Neil Huff; PRISM, Inc.

1 Opening remarks

Bill Sapsis welcomed the group at 19:00. Wendy Holt announced her retirement in May. A round of applause was issued to Wendy.

2 Attendance and membership

2.1 Introduction of those present

Introductions went around the room counterclockwise after the sign-in sheet.

2.2 Circulation of attendance sign-in sheet

A bright yellow sign-in sheet was passed counterclockwise.

2.3 Call for quorum

Sapsis asked for a show of hands of voters. He counted them and then announced that quorum—a veritable supermajority—was present.

2.4 Requirements for membership

Sapsis reminded the assembly that 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:

None

2.6 Processing of new membership requests:

The following applications were received:

Mike Adamovitch; University of Wisconsin; A; G
John Van Arsdale; McLaren Engineering; O; U
Nils Becker; ETC; A; MP

The following observer members asked for a change of status to voting membership:

Peter Scheu; Scheu Consulting Svcs.; P; G
 David Bond, Arcofab, P; U
 Eric Rouse, Penn State; P; U
 Todd Spencer, PSAV; P; U
 David Carmack; Columbus McKinnon; A; MP

Ted Paget, moved that the applications and changes of status be accepted. The move was seconded and approved by a show of hands.

2.7 Consensus Body

The full consensus body 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
William Bradburn	Aerial Arts, Inc.	P	U
Steven C. Shaw	Aerial Rigging	P	DR
Wendy Holt	Alliance of Motion Picture and Television Producers	P	G
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
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
Edward A. (Ted) Paget	Daktronics Inc.	P	CP
Nils Becker	Electronic Theater Controls	A	MP
Michael Lichter	Electronic Theatre Controls, Inc.	P	MP
Dana Bartholomew	Fisher Technical Services, Inc.	P	CP
Scott Fisher	Fisher Technical Services, Inc.	A	CP
Joseph McGeough	Foy Inventerprises, 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

Name	Representing	Voting Status	Interest Category
Ed Garstkiewicz	Harting KGAA	P	G
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
William B. Gorlin	M.G. McLaren, P.C.	P	G
Mike Adamovich	M.G. McLaren, P.C.	A	G
Pat Grenfell	Mainstage Theatrical Supply	P	DR
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
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
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
Bill Sapsis	Sapsis Rigging, Inc.	P	U
Peter A. Scheu	Scheu Consulting Services, Inc.	P	G
Kimberly Corbett	Schuler Shook	P	DE
Joshua Grossman	Schuler Shook	A	DE

Name	Representing	Voting Status	Interest Category
Dan Culhane	SECOA	P	CP
Brad Dittmer	Stage Labor of the Ozarks	P	U
Mark Ager	Stage Technologies Group Ltd.	P	CP
Patrick Leigh Bettington	Stage Technologies Group Ltd.	A	CP
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
Stephen G. Surratt	Texas Scenic Company	P	DR
Rick Rosas	Texas Scenic Company	A	DR
Joel A Guerra	Texas Scenic Company	A	DR
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
Kandie Koed	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		57	
Votes by interest categories:		11	CP
		3	DE
		12	DR
		9	G
		9	MP
		13	U
CP, Custom-market producer			
DE, Designer			
DR, Dealer or Rental Company			
G, General interest			
MP, Mass-market producer			
U, User			

3 Approval of minutes from the previous meeting

See the draft minutes of the 24 January 2013 meeting, *RIGmin01-2013.pdf*.

Eddie Kramer moved that the 24 January 2013 minutes be accepted. The move was seconded and approved by a show of hands.

4 PLASA declarations

4.1 Anti-trust statement

The following 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."

No anti-trust issues were raised.

4.2 Call for patents

The following 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."

No protected intellectual property was reported.

5 Approval of the agenda

Wendy Holt moved that the agenda be approved. The motion was seconded and approved by 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

Karl Ruling informed the group that E1.2 is posted for sale on the ESTA Foundation website and has been sent to ANSI for sale on their site as well.

6.3 ANSI E1.4 - 2009, Entertainment Technology--Manual Counterweight Rigging Systems

This item was rolled over to **New Business** for discussion and possible action.

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

No news or action.

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

There were no public review comments offered in the last review.

Dan Culhane moved that BSR E1.6-2 be accepted as an American National Standard, with this action to be approved by letter ballot. The move was seconded and approved by a show of hands. A letter ballot will be forthcoming.

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

Comment resolution/next step?

Dan Culhane moved that the resolutions be accepted. The motion was seconded and approved by a show of hands with two abstentions. This was a supermajority.

Joe Champelli asked for a delay of any action on the revised draft standard, since he wanted time to share his concerns about the document with the task group. Instead, his concerns were discussed by the working group, which is the consensus body, and the document was modified at the meeting. Changes made include grammatical, semantic and elimination of redundancy, as well as a modification to the connector pin numbering in an annex.

Dan Culhane moved that the revised draft standard (Rig/2010-2008r2L) be offered for public review. The motion was seconded. The motion was approved by show of hands with two abstentions. This was a supermajority.

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

Karl Ruling informed the group that ANSI's eStandards Store had received a request for copy, so they asked him for it, and he sent it to them. Thus, it can be purchased from ANSI's eStandards Store as well as from The ESTA Foundation.

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 vote, public review.

The document will go to public review. The TSC has approved the motion.

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

Dan Culhane had been put in charge of looking at evaluating it for revision or reaffirmation. (See the task group list from the last minutes) Harvey Sweet started a discussion of whether it should be a performance

or prescriptive standard and urged the group to make it be one or the other. Sapsis tasked the task group with making a recommendation after they meet. (They will need a meeting room for summer meeting.)

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

Rocky Paulson moved that the comment resolutions (E1-39_ThrdRvwCmmnts-Resolutions-130205.pdf) be accepted. The motion was seconded and approved by a show of hands with two abstentions.

Rocky Paulson moved that the revised draft standard (BSRE1-39-2013-02-05a.pdf) be offered for public review. The motion was seconded and approved by a show of hands with one abstention.

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

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.

Some comments were offered on the draft document (E1-43 Performer Flying Progress 03-05-2013.pdf) at the meeting. Joe Champelli took notes to take back to the task group.

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

Michael Lichter reported that a few people had offered comments so far. He is looking forward to having all the comments when the review ends 1 April.

6.15 Rigging Glossary

Chris Kaiser gave a report on the rigging glossary task group's work, and offered observations and recommendations on how words are used in RWG documents.

She recommended that we should make sure that words not used in documents are not listed in definitions. She also recommended the use of the Merriam-Webster's Dictionary, noting that the editors of that do a good job of defining everyday words.

Kaiser said that the task group had issues with our use of "competent" in that there were two different endings to the definition being used in various documents. The consensus was to change the end to read, "...and who is authorized to take prompt corrective measures to eliminate hazards."

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.

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

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.

7 New business

7.1 Revising ANSI E1.4 - 2009

Karl Ruling reported his discovery that the standard doesn't require rope locks. Furthermore, how to deal with seismic load requirements in California is not clear.

What to do? See E1-4_revisions.pdf for a list of possible revisions and E1-4_2009.pdf for the existing document.

Richard Nix moved that we start the process of revising the standard. The motion was seconded and unanimously approved by a show of hands.

R. Duane Wilson said that the ASTC's code committee would like to see E1.4 become a standard that the ICC can reference.

There was a discussion of making all standards ICC-acceptable or just some of them. The general consensus of the group is that only some of our documents should be written with the ICC as the intended audience.

The proposed revisions outlined in E1-4_revisions.pdf were discussed and amended. Richard Nix moved that we accept the proposed revisions as amended (E1-4_revisions_R1). The motion was seconded and approved by a show of hands.

Richard Nix moved that at the end of the ANSI PINS period, the group forward the revised E1.4 document with the revisions incorporated to be voted on for public review by letter ballot. The motion was seconded and approved by a show of hands with ten opposed and two abstentions. The motion passed with the required supermajority.

7.2 Other new business

None.

8 Other business and announcements

8.1 NVBF NA 149-00-05 AA Maschinen

Michael Lichter reported that he has been voted into membership in the DIN equivalent of the RWG. Her reported that DIN 56950, the standard for stage machinery, has been split into two parts: DIN 56950-1 and 56950-2. The official publication dates for these is May 2013.

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.

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

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/>.

9 Schedule for future meetings

Bill Sapsis announced that the next meeting is scheduled for Thursday afternoon, 01 August 2013, at the D/FW Marriott Solana.

10 Adjournment

Pete Happe moved that we adjourn. The motion was seconded. Hearing no objections, Bill Sapsis declared the meeting adjourned at 22:18.

Rigging Working Group Membership and Contact Information as of 28 March 2013
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Name (Sort field)	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	Stage Technologies Group Ltd.	P	CP
Tray Allen	James Thomas Engineering, Inc.	James Thomas Engineering, Inc.	P	MP
Frank Allison	Frank Allison	Frank Allison	O	G
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.	Fisher Technical Services, Inc.	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 Theater Controls	Electronic Theater Controls	A	MP
Maria Bement	MGM Grand	MGM Grand	O	U
Patrick Leigh Bettington	Stage Technologies Group Ltd.	Stage Technologies Group Ltd.	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

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Name (Sort field)	Company	Representing	Voting Status	Int. Cat.
Ron Bonner	PLASA Technical Resources Office	PLASA EU	O	G
William Bradburn	Aerial Arts, Inc.	Aerial Arts, Inc.	P	U
Louis Bradfield	Louis Bradfield	Louis Bradfield	O	U
Buddy Braile	Bestek Lighting & Staging	Bestek Lighting & Staging	O	U
Barry Brazell	Barry Brazell	Barry Brazell	O	U
André Broucke	André Broucke	André Broucke	O	G
David M. Campbell	Geiger Engineers	Geiger Engineers	O	G
Vincent J. Cannavale	Motion Laboratories	Motion Laboratories	P	CP
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
Kimberly Corbett	Schuler Shook	Schuler Shook	P	DE
Stu Cox	ZFX Flying Inc.	ZFX Flying Inc.	A	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
Cristina Delboni	Feeling Structures	Feeling Structures	O	MP
Jonathan Deull	JSD Projects LLC	JSD Projects LLC	I	U

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Name (Sort field)	Company	Representing	Voting Status	Int. Cat.
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
James B. Evans	Mountain Productions Inc.	Mountain Productions Inc.	O	DR
Scott Fisher	Fisher Technical Services, Inc.	Fisher Technical Services, Inc.	A	CP
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
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	P	DR
Joshua Grossman	Schuler Shook	Schuler Shook	A	DE
Joel A Guerra	Texas Scenic Company	Texas Scenic Company	A	DR

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Name (Sort field)	Company	Representing	Voting Status	Int. Cat.
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
Ben Hayes	Freedom Flying	Freedom Flying	O	G
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
Wendy Holt	AMPTP/CSATF	Alliance of Motion Picture and Television Producers	P	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.	P	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
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

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Name (Sort field)	Company	Representing	Voting Status	Int. Cat.
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
Kandie Koed	Total Structures Inc.	Total Structures Inc.	A	MP
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

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Name (Sort field)	Company	Representing	Voting Status	Int. Cat.
Joseph McGeough	Flying by Foy	Foy Invenerprises, Inc.	P	CP
Richard C. Mecke	Texas Scenic Company	Texas Scenic Company	O	DR
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
Shawn Nolan	Production Resource Group	Production Resource Group	A	DR
Tracy Nunnally	Hall Associates Flying Effects	Hall Associates Flying Effects	O	CP
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

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Name (Sort field)	Company	Representing	Voting Status	Int. Cat.
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
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	Aerial Rigging	P	DR
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

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Name (Sort field)	Company	Representing	Voting Status	Int. Cat.
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
Marty Wesstrom	Mountain Productions Inc.	Mountain Productions Inc.	P	DR
Jeff Wilkowski	Thern, Inc.	Thern, 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

Key to Voting Status and Interest Category:

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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