

Minutes
Rigging Working Group
Thursday, 24 July 2014
D/FW Marriott Solana
Westlake, TX

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

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

Members attending:

Jesse Adams; Rose Brand; P; DR
Matthew Antonucci; Contract Services Administration Trust Fund; P; U
Brent Armstrong; Alpine Rigging & Structural Design; O; U
Dana Bartholomew; Fisher Technical Services; Tait Towers Manufacturing LLC; P; CP
Scott M. Blair; Full Throttle Films/ VER; A; DR
Steve (BOZ) Bodzioch; LMG Inc.; P; DR
Keith Bohn; I; G
David Carmack; Columbus McKinnon Corp.; A; MP
Joseph Champelli; Entertainment Project Services, LLC; P; DE
Dan Culhane; SECOA; P; CP
Robert Dean; ZFX Flying Inc.; P; CP
Brad Dittmer; Stage Labor of the Ozarks; P; U
Russ Dusek; I Weiss; P; MP
Mike Garl; Mike Garl Consulting LLC; P; DE
Ed Garstkiewicz; Harting Inc., North America; Harting KGAA; P; G
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
Earle T. Greene; Walt Disney Parks and Creative Entertainment; Walt Disney Company; A; U
Rod Haney; I.A.T.S.E. Local 891; P; U
Tim Hansen; Oasis Stage Werks; P; DR
Sandy Harned; ZFX Flying Inc.; A; CP
Herb Hart; Columbus McKinnon Corp.; P; MP
Jeremy Hochman; Full Throttle Films/ VER; P; DR
Donald Hoffend_III; Avista Designs, LLC; A; G
Christopher Jacobs; Virginia Beach City Public Schools; P; U
Dan Lisooowski; University of Wisconsin - Madison; P; U
Marcus Lopez Jr.; LMG; P; DR
Christine L. Kaiser; Syracuse Scenery & Stage Lighting Co., Inc.; P; DR
Roger Lattin; I.A.T.S.E. Local 728; P; U
Joseph McGeough; Flying by Foy; Foy Inventerprises, Inc.; P; CP
Bob McVay; Schuler Shook; A; DE
Rick Montgomery; R&M Materials Handling; P; MP
Mark Newlin; Xtreme Structures and Fabrication; A; 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
Jennifer O'Leary; Columbus McKinnon Corp.; A; MP
Carlos Ortega; PSAV Presentation Services; A; U
Gregory Orth; WNP Services, Inc.; P; DR
Edward A. (Ted) Paget; Daktronics Automated Rigging Solutions; Daktronics Inc. ; P; CP
Galen Price; Blue Man Group; P; U
Steven Ricks; Electronic Theatre Controls, Inc.; P; MP
John Ringelman; Stage Rigging, Inc.; Freeman Companies; P; DR

Chris Schmidt; Stage Rigging, Inc.; Freeman Companies; A; DR
Steven C. Shaw; Levitating Productions, Inc.; P; MP
Todd Spencer; PSAV Presentation Services; P; U
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; O; U
Steve Walker; Steve A. Walker & Associates; P; G
Marty Wesstrom; Mountain Productions Inc.; P; DR
R. Duane Wilson; George C. Izenour Associates; Amer. Society of Theatre Consultants; P; DE

Visitors:

Ritchie Argue; Revolution Display
Ken Tilson; Columbus McKinnon Corp.
Shawn Sack; A.C.T. Lighting

1 Opening remarks

Bill Sapsis called the meeting to order at 19:00 by saying "Good evening." He welcomed everyone to another on time departure for the PLASA Technical Standards Program.

2 Attendance and membership

2.1 Introduction of those present

Introductions took place clockwise around the table and room.

2.2 Circulation of attendance sign-in sheet

A hot salmon sign-in sheet was passed counter-clockwise to be signed by those present.

2.3 Call for quorum

Bill Sapsis counted voters' raised hands and announced a quorum present—in fact, more than a majority

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

The following voters were moved to Observer status due to lack of attendance. They have missed the previous two meetings and, per the Policies and Procedures, have been moved to Observer status by missing a third:

Robert Young and James Niesel; Arup
Ted Jones; Chicago Spotlight, Inc.
Daniel J. Clark; Clark-Reder Engineering, Inc.
Pat Grenfell; Hoist Sales & Service
Eric Rouse; Pennsylvania State University

2.6 Processing of new membership requests:

As of 24 July, the following applications have been received and logged:

Timothy Carlson; Circus Juventas; P; G -- not present; Accept as Observer
Robert Dean; ZFX Flying Inc.; P; CP
Sandy Harned; ZFX Flying Inc.; A; CP
Michael Gosenski, O; U
Marcus Lopez; LMG; P; DR
Ford Sellers; Chauvet Lighting; O; MP
Wendy Manson; Cirque Du Soleil; O; U

Ken Lager; LaFace & McGovern Associates; P; DR – not present; Accept as Observer
 Sanford P. Gilzow; Shur-Rig LLC; O; G
 Michael Viehmeyer; O; U

Tim Hansen moved to approve the applications with changes. The motion was seconded and approved by a unanimous show of hands.

2.7 Consensus body

The full consensus body during this meeting, including those not present, was:

Delegate	Company	Representing	Voting status	Int. cat.
Woody Pyeatt	A V Pro, Inc.	A V Pro, Inc.	P	DR
Ethan William Gilson	ALPS	Advanced Lighting and Production Services	P	U
R. Duane Wilson	George C. Izenour Associates	Amer. Society of Theatre Consultants	P	DE
Donald A. Hoffend_Jr.	Avista Designs, LLC	Avista Designs, LLC	P	G
Donald Hoffend_III	Avista Designs, LLC	Avista Designs, LLC	A	G
Galen Price	Blue Man Group	Blue Man Group	P	U
Herb Hart	Columbus McKinnon Corp.	Columbus McKinnon Corp.	P	MP
Art Zobal	Columbus McKinnon Corp.	Columbus McKinnon Corp.	A	MP
David Carmack	Columbus McKinnon Corp.	Columbus McKinnon Corp.	A	MP
Jennifer O'Leary	Columbus McKinnon Corp.	Columbus McKinnon Corp.	A	MP
Matthew Antonucci	Contract Services Administration Trust Fund	Contract Services Administration Trust Fund	P	U
Edward A. (Ted) Paget	Daktronics Automated Rigging Solutions	Daktronics Inc.	P	CP
Steven Ricks	Electronic Theatre Controls, Inc.	Electronic Theatre Controls, Inc.	P	MP
Michael Lichter	Electronic Theatre Controls, Inc. (DE)	Electronic Theatre Controls, Inc.	A	MP
Nils Becker	Electronic Theatre Controls, Inc.	Electronic Theatre Controls, Inc.	A	MP
Joseph Champelli	Entertainment Project Services, LLC	Entertainment Project Services, LLC	P	DE
Steven Michelman	Entertainment Project Services, LLC	Entertainment Project Services, LLC	A	DE
Joseph McGeough	Flying by Foy	Foy Invenerprises, Inc.	P	CP
John Ringelman	Stage Rigging, Inc.	Freeman Companies	P	DR
Rocky Paulson	Stage Rigging, Inc.	Freeman Companies	A	DR
Chris Schmidt	Stage Rigging, Inc.	Freeman Companies	A	DR
Jeremy Hochman	Full Throttle Films/ VER	Full Throttle Films/ VER	P	DR
Scott M. Blair	Full Throttle Films/ VER	Full Throttle Films/ VER	A	DR
Miriam Paschetto	Geiger Engineers	Geiger Engineers	P	G
Reid Neslage	H & H Specialties Inc.	H & H Specialties Inc.	P	MP
Tracy Nunnally	Hall Associates Flying Effects	Hall Associates Flying Effects	P	CP
John P. Moore	Hall Associates Flying Effects	Hall Associates Flying Effects	A	CP
Ed Garstkiewicz	Harting Inc., North America	Harting KGAA	P	G
Howard Forryan	Harting Ltd.	Harting KGAA	A	G
Edwin S. Kramer	I.A.T.S.E. Local 1	I.A.T.S.E. Local 1	P	U

Delegate	Company	Representing	Voting status	Int. cat.
Roger Lattin	I.A.T.S.E. Local 728	I.A.T.S.E. Local 728	P	U
Rod Haney	I.A.T.S.E. Local 891	I.A.T.S.E. Local 891	P	U
Russ Dusek	I Weiss	I Weiss	P	MP
Tray Allen	James Thomas Engineering, Inc.	James Thomas Engineering, Inc.	P	MP
Jonathan Deull	JSD Projects LLC	JSD Projects LLC	I	U
Jerald Kraft	JTH Lighting Alliance	JTH Lighting Alliance	P	CP
Keith Bohn	Keith Bohn	Keith Bohn	I	G
Steven C. Shaw	Levitating Productions, Inc.	Levitating Productions, Inc.	P	MP
William Beautyman	Limelight Productions, Inc.	Limelight Productions, Inc.	P	DR
Marcus Lopez Jr.	LMG	LMG	P	DR
Steve (BOZ) Bodzioch	LMG Inc.	LMG Inc.	P	DR
Douglas M. Eldredge	LMG Inc.	LMG Inc.	A	DR
William B. Gorlin	McLaren Engineering Group	M.G. McLaren, P.C.	P	G
Mike Adamovich	McLaren Engineering Group	M.G. McLaren, P.C.	A	G
Mike Garl	Mike Garl Consulting LLC	Mike Garl Consulting LLC	P	DE
Will Todd	Tomcat USA, Inc.	Milos Group	P	MP
Scott Johnson	Tomcat USA, Inc.	Milos Group	A	MP
Vincent J. Cannavale	Motion Laboratories	Motion Laboratories	P	CP
Peter Herrmann	Motion Laboratories	Motion Laboratories	A	CP
David Herrmann	Motion Laboratories	Motion Laboratories	A	CP
Gregory Quinkert	Motion Laboratories	Motion Laboratories	A	CP
Marty Wesstrom	Mountain Productions Inc.	Mountain Productions Inc.	P	DR
Joseph Jeremy	Niscon Inc.	Niscon Inc.	P	CP
Tim Hansen	Oasis Stage Werks	Oasis Stage Werks	P	DR
Orestes Mihaly	Production Resource Group	Production Resource Group	P	DR
Shawn Nolan	Production Resource Group	Production Resource Group	A	DR
Todd Spencer	PSAV Presentation Services	PSAV Presentation Services	P	U
Carlos Ortega	PSAV Presentation Services	PSAV Presentation Services	A	U
Rick Montgomery	R&M Materials Handling	R&M Materials Handling	P	MP
Bruce Darden	Rigging Innovators, Inc.	Rigging Innovators, Inc.	P	CP
Jesse Adams	Rose Brand	Rose Brand	P	DR
Patrick J. Finn	Sapsis Rigging, Inc.	Sapsis Rigging, Inc.	P	U
Bill Sapsis	Sapsis Rigging, Inc.	Sapsis Rigging, Inc.	A	U
Peter A. Scheu	Scheu Consulting Services, Inc.	Scheu Consulting Services, Inc.	P	DE
Kimberly Corbett Oates	Schuler Shook	Schuler Shook	P	DE
Joshua Grossman	Schuler Shook	Schuler Shook	A	DE

Delegate	Company	Representing	Voting status	Int. cat.
Bob McVay	Schuler Shook	Schuler Shook	A	DE
Dan Culhane	SECOA	SECOA	P	CP
Brad Dittmer	Stage Labor of the Ozarks	Stage Labor of the Ozarks	P	U
Steve Walker	Steve A. Walker & Associates	Steve A. Walker & Associates	P	G
Richard J. Nix	Entertainment Structures Group	Steven Schaefer Associates	P	G
Kyle Kusmer	Entertainment Structures Group	Steven Schaefer Associates	A	G
Christine L. Kaiser	Syracuse Scenery & Stage Lighting Co., Inc.	Syracuse Scenery & Stage Lighting Co., Inc.	P	DR
Dana Bartholomew	Fisher Technical Services	Tait Towers Manufacturing LLC	P	CP
Mark Ager	Stage Technologies	Tait Towers Manufacturing LLC	A	CP
Patrick Leigh Bettington	Stage Technologies	Tait Towers Manufacturing LLC	A	CP
Stephen G. Surratt	Texas Scenic Company	Texas Scenic Company	P	DR
Rick Rosas	Texas Scenic Company	Texas Scenic Company	A	DR
Joel A Guerra	Texas Scenic Company	Texas Scenic Company	A	DR
Jyle Nogee	Texas Scenic Company	Texas Scenic Company	A	DR
Jerry Gorrell	Theatre Safety Programs	Theatre Safety Programs	P	G
Sam Michael	Thern, Inc.	Thern, Inc.	P	MP
Jeff Wilkowski	Thern, Inc.	Thern, Inc.	A	MP
Adrian Forbes-Black	Total Structures, Inc.	Total Structures Inc.	P	MP
Elmer Veith	Total Structures - Eastern US Office	Total Structures, Inc.	A	MP
Theresa Kelley	Total Structures, Inc.	Total Structures Inc.	A	MP
Don Halchak	Total Structures Inc.	Total Structures Inc.	A	MP
Dan Lisowski	Dept. Of Theatre and Drama	University of Wisconsin - Madison	P	U
Christopher Jacobs	Virginia Beach City Public Schools	Virginia Beach City Public Schools	P	U
Pete Happe	Walt Disney Imagineering	Walt Disney Company	P	U
Jeff T. Miller	Worldwide Standards and Auditing	Walt Disney Company	A	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
Gregory Orth	WNP Services, Inc.	WNP Services, Inc.	P	DR
Robert Ramsey	WNP Services, Inc.	WNP Services, Inc.	A	DR
Michael Wells	Xtreme Structures and Fabrication	Xtreme Structures and Fabrication	P	MP
Mark Newlin	Xtreme Structures and Fabrication	Xtreme Structures and Fabrication	A	MP
Robert Dean	ZFX Flying Inc.	ZFX Flying Inc.	P	CP
Stu Cox	ZFX Flying Inc.	ZFX Flying Inc.	A	CP
Sandy Harned	ZFX Flying Inc.	ZFX Flying Inc.	A	CP
		Total votes possible	62	

Subtotals by interest categories	11	CP
	6	DE
	13	DR
	8	G
	11	MP
	13	U

3 Approval of minutes from the previous meeting

See the draft minutes of the March meeting, *RIGmin03-2014.pdf*.

Dan Culhane moved to approve the minutes of the last meeting. The motion received a second. Richard Nix asked for a change: "next" to "LDI" in the item pertaining to E1.50. With no objections or further edits, the revised minutes were approved with a show of hands.

4 PLASA declarations

4.1 Reading of the 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.

The pamphlet was held up by Erin Grabe and Karl Ruling. No issues or questions were raised.

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

Ted Paget moved that the agenda be accepted. The motion received a second before the following additions:

Dan Culhane added an item under Other new business dealing with UL 10D

Bill Sapsis added a request from the Technical Marketing Group.

With no objections or further edits, the modified agenda was approved with a show of hands.

6 Old business

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

It was noted the BSI is in the process of drafting a similar standard based off this standard.

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

Richard Nix reported that the group met and was productive. They seem to be over half way through the discussion to decide what changes need to be made. It is their intention to have a document for public review consideration by LDI meeting.

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

Ethan Gilson noted that the group has met and is making headway, but that they will likely not have something for consideration at next meeting.

6.5 E1.4-3 - 201x - Hand winch rigging

Richard Nix announced that the first task group meeting will be tomorrow, 25 July 2014.

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 ANSI 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)

No news or action at this time.

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

See *BSR E1-22-201x.pdf* submitted by Dan Culhane.

Dan Culhane moved that the document be offered for public review. The motion was seconded. There was discussion of some of the requirements in the draft. By a show of hands, the motion carried, with one against and four abstentions, and the rest in favor.

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

Ethan Gilson reported that the group has not met yet to draft resolutions. However, he noted that he does not think that the resolutions will require substantive change to the draft standard.

It was suggested that, due to the few number of comments, the working group should take on the task of drafting resolutions together. The document was displayed, discussed, and resolutions to each comment were drafted by consensus.

Richard Nix moved that we accept the comment resolutions. The motion was seconded and approved by the working group's show of hands, with two abstentions and the rest in favor.

Brad Dittmer moved to offer the revised document for public review with a concurrent vote to accept it as an ANS. By show of hands, all were in favor, except for one abstention.

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

Bill Gorlin reported that the task group got through about 80% of the 147 comments. He plans to have a new version for the LDI meeting. Bill Gorlin also noted that many of the comments are well-thought out and helpful.

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

Chris Kaiser addressed the group by suggesting the addition of a group-sanctioned definition for *design factor* and *working load limit*. Shawn Nolan agreed with the usefulness of such definitions and volunteered to craft language for Chris Kaiser and task group.

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

Chris Kaiser addressed the group by saying that each comment offered by working group member had been addressed and that in her opinion public review was the next step.

Ted Paget moved that BSR E1.47 be offered for public review. The motion was seconded. There was a brief discussion about making comments on the document in public review or now, before public review. The motion carried by a unanimous show of hands.

6.18 BSR E1.50—Video wall project

Richard Nix reported that the group had a good meeting yesterday. The task group will get a document to the working group for review before the LDI meeting. He does not think that that version will be ready for public review then, but it will be ready for working group review.

Richard Nix went on to say that the task group is considering allowing rope access as an alternative to fall arrest system. He asked if anyone had information about the acceptability of rope access.

7 New business

7.1 Rigging point construction standard

Shawn Nolan reported on the work of the group. He suggested that it might be part of the E1.4 suite. Todd Spencer argued that it should be stand-alone. There was further discussion of what might be covered in a standard. One question was, "Should the standard include portable rigging points?" The consensus was that this standard should deal with permanent points--fixed points that are expected to be in place for many months or years.

Tim Hansen moved that we approve the project request. The motion was seconded and approved by a unanimous show of hands.

Bill Sapsis assigned Pete Happe, Carlos Ortega, Jonathan Deull, Chris Schmidt, Shawn Nolan, and Mike Wells to be on the task group.

7.2 Other new business

8 Other business and announcements

8.1 UL 10D

UL 10D does not apply to proscenium type fire safety curtains, reported Dan Culhane.

8.2 Technical marketing group

Bill Sapsis reported that PLASA is looking for a representative from the RWG to be on this committee to develop marketing campaigns to promote rigging standards. Chris Kaiser objected to the timing of the meeting. Bill Sapsis said that he will see about moving the meeting time. Scott Blair suggested Friday night.

8.3 Above & Beyond Awards

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

8.4 TSP sessions at LDI 2014

The time, date, and participants for "Outdoor structures: What's new in ANSI E1.21 and why old is too old" was given. (NOTE: After the meeting, the time and date were changed to Friday, 21 November from 9:00-11:30 a.m.) "Rescue Planning" with Bill Sapsis remains on 20 November 2014, from 3:30-5:00 p.m.

8.3 CEN standards update

Karl Ruling reported that the group is working on a business plan, as required.

9 Schedule for future meetings

Bill Sapsis reported that the next meeting is scheduled for Wednesday, 19 November 2014, from 7:00 to 11:00 p.m., at the Westgate Las Vegas Resort & Casino, formerly known as the Las Vegas Hotel (LVH) in Las Vegas, NV. Please check <http://na.plasa.org/news/meetings.php> for the most up-to-date schedule information.

10 Adjournment

Ted Paget moved to adjourn. The motion was seconded. Hearing no objections, Bill Sapsis announced the meeting adjourned at 21:42.

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 Armstrong	Alpine Rigging & Structural Design	Alpine Rigging & Structural Design	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.	P	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
Timothy Carlson	Circus Juventas	Circus Juventas	O	G
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.	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.	P	CP
Randall W. A. Davidson	Risk International & Associates, Inc.	Risk International & Associates, Inc.	O	U
Robert Dean	ZFX Flying Inc.	ZFX Flying Inc.	P	CP
François Deffarges	Nexo	Nexo	O	MP
Jonathan Deull	JSD Projects LLC	JSD Projects LLC	I	U
Jim Digby	The Collaborative Endeavor Group	Linkin Park Touring/The Collective	O	U
Brad Dittmer	Stage Labor of the Ozarks	Stage Labor of the Ozarks	P	U

Name	Company	Representing	Voting status	Int. cat.
Russ Dusek	I Weiss	I Weiss	P	MP
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	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
Sanford P. Gilzow	Shur-Rig LLC	Shur-Rig LLC	O	G
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
Michael P. Gosenski	Rigging Systems LLC	Rigging Systems LLC	O	U
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	O	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

Name	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
Sandy Harned	ZFX Flying Inc.	ZFX Flying Inc.	A	CP
Dean Hart	Stage Rigging, Inc.	Freeman Companies	O	U
Herb Hart	Columbus McKinnon Corp.	Columbus McKinnon Corp.	P	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.	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
Marcus Lopez Jr.	LMG	LMG	P	DR
Gary Justesen	Oasis Stage Werks	Oasis Stage Werks	O	DR

Name	Company	Representing	Voting status	Int. cat.
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
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
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 P. Lager	LaFace & McGovern Associates	LaFace & McGovern Associates	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
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
Wendy Manson	Cirque Du Soleil, Inc.	Cirque Du Soleil, Inc.	O	U
Gary Mardling	Kish Rigging	Kish Rigging	O	DR
Chuck McClelland	Jeamar Winches Inc.	Jeamar Winches Inc.	O	MP
Joseph McGeough	Flying by Foy	Foy Inventerprises, Inc.	P	CP

Name	Company	Representing	Voting status	Int. cat.
Bob McVay	Schuler Shook	Schuler Shook	A	DE
Richard C. Mecke	Texas Scenic Company	Texas Scenic Company	O	DR
Sam Michael	Thern, Inc.	Thern, Inc.	P	MP
Steven Michelman	Entertainment Project Services, LLC	Entertainment Project Services, LLC	A	DE
Orestes Mihaly	Production Resource Group	Production Resource Group	P	DR
Hank Miller	W.E. Palmer Co.	W.E. Palmer Co.	O	CP
Jeff T. Miller	Worldwide Standards and Auditing	Walt Disney Company	A	U
John Miller	University of North Carolina School of the Arts	University of North Carolina School of the Arts	O	U
Shaun Millington	SEW-Eurodrive, Inc.	SEW-Eurodrive, Inc.	O	MP
Timothy Mills	Geiger Engineers	Geiger Engineers	O	G
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	O	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

Name	Company	Representing	Voting status	Int. cat.
Kimberly Corbett Oates	Schuler Shook	Schuler Shook	P	DE
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
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
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
Chris Schmidt	Stage Rigging, Inc.	Freeman Companies	A	DR

Name	Company	Representing	Voting status	Int. cat.
Peter "Punch" Christian Schmidtke	Hollywood Lighting Services, Inc.	Hollywood Lighting, Inc.	O	DR
Ford Sellers	Chauvet Lighting	Chauvet Lighting	O	MP
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	Michael Viehmeyer	Michael Viehmeyer	O	U
Steve Walker	Steve A. Walker & Associates	Steve A. Walker & Associates	P	G
Michael Wells	Xtreme Structures and Fabrication	Xtreme Structures and Fabrication	P	MP
Marty Wesstrom	Mountain Productions Inc.	Mountain Productions Inc.	P	DR
Jeff Wilkowski	Thern, Inc.	Thern, Inc.	A	MP
R. Duane Wilson	George C. Izenour Associates	Amer. Society of Theatre Consultants	P	DE

Name	Company	Representing	Voting status	Int. cat.
Jiantong Wu	Beijing Special Engineering Design & Research Institute	Beijing Special Engineering Design & Research Institute	O	G
Robert Young	Arup	Arup	O	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, exf = ex officio

Interest Category Key:

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