

Minutes
RIGGING WORKING GROUP
Friday, 25 July 2003
Dallas/Ft. Worth Airport Marriott South
Ft. Worth, TX

Chairman: Mike Garl; James Thomas Engineering, Inc.; P; MP

Recording secretary: Karl G. Ruling; ESTA

Members attending: Bill Sapsis; Sapsis Rigging, Inc.; P; U
Wally Blount; Columbus McKinnon Corp.; A; MP
Jerry Gorrell; Theatre Safety Programs; P; G
Tray Allen; James Thomas Engineering, Inc.; A; MP
Reid Neslage; H & H Specialties Inc.; P; MP
Rodney F. Kaiser; J.R. Clancy Inc.; P; CP
Randall W. A. Davidson; Risk International & Associates, Inc.; O; U
Andrew T. Martin; ATM Group, Inc.; P; MP
Tim Hansen; Oasis Stage Werks; P; DR
Kent H. Jorgensen; MPS Grips, Local 80; O; G
Edwin S. Kramer; I.A.T.S.E, Local 1; P; U
Thomas S. Young; J.R. Clancy Inc.; A; CP
Pete Happe; Walt Disney Imagineering (Walt Disney); P; U
Michael G. Wiener; Aerial Rigging & Leasing, Inc.; P; U (change of voting status at this meeting)
Dan Culhane; SECOA; P; CP
M. Brad Dittmer; Downhome Productions - Springfield, MO; P; U
Nevin Kleege; Kleege Industries; O; U
Jeffrey Hoffend; Hoffend & Sons, Inc.; P; CP
Brian Dowd; TMB; P; CP
Peter A. Scheu; Scheu Consulting Services; P; G
William Conner; Schuler & Shook Inc., representing the Amer. Society of Theatre Consultants; P; U
Larry Lutz; Texas Scenic Company; P; CP
Hans van der Moolen; Stagemaker Division Europe (Verlinde Spa. France); P; MP
Richard D. Thompson; Thompson Associates; P; G
Robin Crews; Wrightson, Johnson, Haddon & Williams, Inc.; P; G
Shawn Nolan; Entertainment Structures Group (Steven Schafer Associates); O; G
Ron Bonner; PLASA; P; G
Jeff Wilkowski; Thern, Inc.; P; MP
Michael Patterson; Theatre Projects Consultants, Inc.; P; U (change of voting status at this meeting)
Richard J. Nix; Performance Systems Integration; P; G
F. Robert Bauer; F.R. Bauer & Associates, LLC; P; G (joined at this meeting)
Michael Keppler; Bogen (IFF); P; MP (joined at this meeting)
Tim Franklin; Theta-Consulting; P; G (joined at this meeting)

Key to codes:	P	principal voting member	MP	mass-market producer interest category
	A	alternate voting member	CP	custom-market producer interest category
	I	individual voting member	DR	dealer or rental company interest category
	O	observer, non-voting	U	user interest category
			G	general-interest interest category

Visitors: Mark Arthur; R&M
Greg Hereld; Kleege Industries, Inc.
Steven Ehrenberg; Clear Channel Entertainment – Theatrical

Patrick J. Basil; IATSE 720
 Steve Walker; Steve A. Walker & Associates

1 Opening remarks

The meeting was called to order by Mike Garl at 19:07. Garl thanked all for coming.

2 Attendance and membership

2.1 Introduction of those present

Garl asked those present to introduce themselves, which they did. While this was done a purple and pink attendance sign-in sheet was circulated.

2.2 Call for quorum

Eleven voting members were needed for quorum. Mike Garl stated that we have a quorum.

2.3 Requirements for membership

The following was read aloud by Mike Garl:

"Membership is open to all who are affected by the work of the group. However, voting members are required to attend meetings. Any principal member and voting alternate who both miss three consecutive meetings will have their membership status changed to observer. This action will be taken as the last item of business at each meeting and recorded in the minutes of that meeting."

3 Processing of new membership requests

Applications had been received from the following:

- Michael L. Savage, Sr.; Middle Dept. Inspection Agency, Inc.; observer; general interest
- F. Robert Bauer; F.R. Bauer & Associates LLC; principal; general interest
- Deborah Sperry; Tent Tec; observer; user
- Michael Keppler; Bogen Photo Corp., representing parent company IFF; principal; mass-market producer
- Timothy Franklin; Theta-Consulting; principal; general interest

Dan Culhane moved that the applications be accepted. The motion was seconded. The motion was approved with a unanimous show of hands.

Michael Patterson of Theatre Projects Consultants asked if he could have his voting status be changed from observer to principal. Richard Nix moved that Michael Patterson be accepted as a principal voting member. The motion was seconded. The motion was approved with a unanimous show of hands.

Michael G. Wiener of Aerial Rigging & Leasing asked if his voting status could be changed from observer to principal. Hans van der Moolen moved Michael G. Wiener be accepted as a principal voting member. The motion was seconded. The motion was approved with a unanimous show of hands.

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

Name	Company	Representing (This is the sort field.)	voting status	interest category				
				G	U	MP	CP	DR
Baer Long	Ninja Rigging	Act 1 Rigging Inc.	P	1				
Michael Weiner	Aerial Rigging & Leasing	Aerial Rigging & Leasing	P		1			
William Conner	Schuler & Shook Inc.	Amer. Society of Theatre Consultants	P		1			
Andrew T. Martin	ATM Group, Inc.	ATM Group, Inc.	P			1		
Don Dimitroff	Columbus McKinnon Corp.	Columbus McKinnon Corp.	P			1		
Wally Blount	Columbus McKinnon Corp.	Columbus McKinnon Corp.	A					
M. Brad Dittmer	Downhome Productions - Springfield, MO	Downhome Productions	P		1			
F. Robert Bauer	F.R. Bauer & Associates LLC	F.R. Bauer & Associates LLC	P	1				
David M. Campbell	Geiger Engineers	Geiger Engineers	P	1				
Reid Neslage	H & H Specialties Inc.	H & H Specialties Inc.	P			1		
Jeffrey Hoffend	Hoffend & Sons, Inc.	Hoffend & Sons, Inc.	P				1	
Peter Hoffend	Hoffend & Sons, Inc.	Hoffend & Sons, Inc.	A					

No anti-trust or restraint of trade issues were brought to the attention of the group.

5.2The following call for patents was read aloud by Mike Garl:

"ESTA intends to publish no standard that contains protected intellectual property, unless that property can be licensed by anyone for a reasonable fee. ESTA uses a process of open patent disclosures to implement this intent. ESTA does not conduct patent searches and does not warrant that its standards contain no protected intellectual property.

"In keeping with the open disclosure policy, I ask if anyone present wishes to notify the working group of the existence of a patent that might protect material in a standard being developed by the working group. You need not be the holder of the patent in order to notify the working group of its existence."

No protected intellectual property issues were brought to the attention of the group.

6 Approval of agenda

Bill Sapsis moved that the draft agenda be accepted. The motion was seconded. The motion was approved with a unanimous voice vote.

7 Old business

7.1E1.2 – Aluminum trusses and towers revision

Mike Garl reported that there is a task group meeting scheduled to work on the comment resolutions.

7.2E1.4 – Manual rigging systems

Richard Nix moved that the comment resolution document (Rig/2003-2009) be accepted. The motion was seconded. There was discussion.

Bill Conner moved that the motion be amended, that we accept the comment resolutions, except that the resolutions for comments 192, 193, and 194. The motion was seconded. By a show of hands, all voted Yes, except for one who voted Abstain. None voted No.

The three disputed resolutions were discussed, and a new version of the comment resolution document was created (Rig/2003-2009r1) identical to the previous comment resolution document, except for these three resolution.

Conner moved that the revised comment resolution document be accepted. The motion was seconded. With the exception of one abstention, there was a unanimous show of hands in support of the motion. The comment resolutions were accepted by the required supermajority.

Karl Ruling revised the draft E1.4 document (Rig/1997-2002r7) to include these new resolutions and created a version r8. Richard Nix moved that the revised draft standard (Rig/1997-2002r8) be sent to another public review. The motion was seconded. The motion was approved by a supermajority on a roll call ballot.

Name	Company	Representing	Voting status	Int. categories					Yes	No	Abstain
				G	U	MP	CP	DR			
Baer Long	Ninja Rigging	Act 1 Rigging Inc.	P	1					0	0	0
Michael Weiner	Aerial Rigging & Leasing	Aerial Rigging & Leasing	P		1				1		
William Conner	Schuler & Shook Inc.	Amer. Society of Theatre Consultants	P		1				1	0	0
Andrew T. Martin	ATM Group, Inc.	ATM Group, Inc.	P			1			1	0	0
Wally Blount	Columbus McKinnon Corp.	Columbus McKinnon Corp.	A			1			1	0	0
M. Brad Dittmer	Downhome Productions - Springfield, MO	Downhome Productions	P		1				1	0	0
F. Robert Bauer	F.R. Bauer & Associates LLC	F.R. Bauer & Associates LLC	P	1					1		
David M. Campbell	Geiger Engineers	Geiger Engineers	P	1					0	0	0
Reid Neslage	H & H Specialties Inc.	H & H Specialties Inc.	P			1			1	0	0
Jeffrey Hoffend	Hoffend & Sons, Inc.	Hoffend & Sons, Inc.	P				1		1	0	0
Edwin S. Kramer	I.A.T.S.E, Local 1	I.A.T.S.E. Local 1	P		1				1	0	0

Michael Keppler	Bogen Photo Corp.	IFF	P			1			1				
Rodney F. Kaiser	J.R. Clancy Inc.	J.R. Clancy, Inc.	P			1			1	0	0		
Tray Allen	James Thomas Engineering, Inc.	James Thomas Engineering, Inc.	A			1			1	0	0		
Edward Paget	Jones & Phillips Associates, Inc.	Jones & Phillips Associates, Inc.	P	1					0	0	0		
Christopher Purpura	Jones & Phillips Associates, Inc.	Jones & Phillips Associates, Inc.	A	1					0	0	0		
William Beautyman	Limelight Productions, Inc.	Limelight Productions, Inc.	P						1	0	0	0	
Harvey Sweet	LVH Entertainment Systems	LVH Electric, Inc.	P						1	0	0	0	
Tim Hansen	Oasis Stage Werks	Oasis Stage Werks	P						1	1	0	0	
Robert A. Grenier Jr.	Ocean State Rigging Systems Inc.	Ocean State Rigging Systems Inc.	P						1	0	0	0	
JoAnna Lloyd	Ocean State Rigging Systems Inc.	Ocean State Rigging Systems Inc.	A						1	0	0	0	
Richard J. Nix	Performance Systems Integration	Performance Systems Integration	P	1					1	0	0		
Ron Bonner	PLASA	PLASA	P	1					1	0	0		
Michael Akrep	Polar Focus, Inc.	Polar Focus, Inc.	P			1			0	0	0		
Bill Sapsis	Sapsis Rigging, Inc.	Sapsis Rigging, Inc.	P		1				1	0	0		
Peter A. Scheu	Scheu Consulting Services	Scheu Consulting Services	P	1					1	0	0		
Dan Culhane	SECOA	SECOA	P				1		1	0	0		
Larry Lutz	Texas Scenic Company	Texas Scenic Company	P				1		1	0	0		
Michael Patterson	Theatre Projects Consultants	Theatre Projects Consultants	P		1				1				
Jerry Gorrell	Theatre Safety Programs	Theatre Safety Programs	P	1					1	0	0		
John C. Snook	Thermotex Industries Inc.	Thermotex Industries Inc.	P				1		0	0	0		
Jeff Wilkowski	Thern, Inc.	Thern, Inc.	P			1			1	0	0		
Tim Franklin	Theta-Consulting	Theta-Consulting	P	1					1				
Richard D. Thompson	Thompson Associates	Thompson Associates	P	1					0	0	0		
Brian Dowd	TMB (NJ)	TMB	P				1		1	0	0		
Keith Bohn	Tomcat USA, Inc.	Tomcat USA, Inc.	P			1			0	0	0		
John James	Tomcat USA, Inc.	Tomcat USA, Inc.	A			1			0	0	0		
Mitch Clark	Tomcat USA, Inc.	Tomcat USA, Inc.	A			1			0	0	0		
Peter Hind	Total Structures, Inc.	Total Structures, Inc.	P			1			0	0	0		
Doug Recher	Total Structures, Inc.	Total Structures, Inc.	A			1			0	0	0		
Ian Coles	Total Structures, Inc.	Total Structures, Inc.	A			1			0	0	0		
Peter Johns	Total Structures, Inc.	Total Structures, Inc.	A			1			0	0	0		
Hans van der Moolen	Stagemaker Division Europe	Verlinde Spa. France	P			1			1	0	0		
Pete Happe	Walt Disney Imagineering	Walt Disney	P		1				1	0	0		
Robin Crews	Wrightson, Johnson, Haddon & Williams, Inc.	Wrightson, Johnson, Haddon & Williams, Inc.	P	1					1	0	0		
					38 possible	11 G	7 U	10 MP	6 CP	4 DR	27 Yes	0 No	0 Abstain
			Votes by interest category			Yes	7	7	7	5	1		
						No	0	0	0	0			
						Abstain	0	0	0	0			

7.3E1.6 – Powered rigging systems

Tom Young reported that the task group had had a good meeting recently and expected to have a document available for the ETS-LDI working group meeting.

7.4E1.7 - Recommended practice for flying performers

Karl Ruling stated that it is in public review until the end of the business day in New York City, 29 July – four days from now.

7.5E1.8 - Speaker enclosures rigging standard

Andrew Martin moved that the revised comment resolutions document (Rig/2003-2005r1) be accepted. The motion was seconded. The motion was accepted by a supermajority of the working group with a unanimous show of hands.

Andrew Martin moved that the revised version of BSR E1.8 (Rig/1997-2021r9) be sent to another public review. The motion was seconded. The motion was approved by a supermajority of the working group via a roll call ballot.

Name	Company	Representing	Voting status	Int. categories					Yes	No	Abstain	
				G	U	MP	CP	DR				
Baer Long	Ninja Rigging	Act 1 Rigging Inc.	P	1					0	0	0	
Michael Weiner	Aerial Rigging & Leasing	Aerial Rigging & Leasing	P		1				1			
William Conner	Schuler & Shook Inc.	Amer. Society of Theatre Consultants	P		1				1	0	0	
Andrew T. Martin	ATM Group, Inc.	ATM Group, Inc.	P			1			1	0	0	
Wally Blount	Columbus McKinnon Corp.	Columbus McKinnon Corp.	A			1			1	0	0	
M. Brad Dittmer	Downhome Productions - Springfield, MO	Downhome Productions	P		1				1	0	0	
F. Robert Bauer	F.R. Bauer & Associates LLC	F.R. Bauer & Associates LLC	P	1					1			
David M. Campbell	Geiger Engineers	Geiger Engineers	P	1					0	0	0	
Reid Neslage	H & H Specialties Inc.	H & H Specialties Inc.	P			1			1	0	0	
Jeffrey Hoffend	Hoffend & Sons, Inc.	Hoffend & Sons, Inc.	P				1		1	0	0	
Edwin S. Kramer	I.A.T.S.E., Local 1	I.A.T.S.E. Local 1	P		1				1	0	0	
Michael Keppler	Bogen Photo Corp.	IFF	P			1			1			
Rodney F. Kaiser	J.R. Clancy Inc.	J.R. Clancy, Inc.	P				1		1	0	0	
Tray Allen	James Thomas Engineering, Inc.	James Thomas Engineering, Inc.	A			1			1	0	0	
Edward Paget	Jones & Phillips Associates, Inc.	Jones & Phillips Associates, Inc.	P	1					0	0	0	
Christopher Purpura	Jones & Phillips Associates, Inc.	Jones & Phillips Associates, Inc.	A	1					0	0	0	
William Beautyman	Limelight Productions, Inc.	Limelight Productions, Inc.	P				1		0	0	0	
Harvey Sweet	LVH Entertainment Systems	LVH Electric, Inc.	P				1		0	0	0	
Tim Hansen	Oasis Stage Werks	Oasis Stage Werks	P				1	1	0	0	0	
Robert A. Grenier Jr.	Ocean State Rigging Systems Inc.	Ocean State Rigging Systems Inc.	P				1		0	0	0	
JoAnna Lloyd	Ocean State Rigging Systems Inc.	Ocean State Rigging Systems Inc.	A				1		0	0	0	
Richard J. Nix	Performance Systems Integration	Performance Systems Integration	P	1					1	0	0	
Ron Bonner	PLASA	PLASA	P	1					1	0	0	
Michael Akrep	Polar Focus, Inc.	Polar Focus, Inc.	P			1			0	0	0	
Bill Sapsis	Sapsis Rigging, Inc.	Sapsis Rigging, Inc.	P		1				1	0	0	
Peter A. Scheu	Scheu Consulting Services	Scheu Consulting Services	P	1					1	0	0	
Dan Culhane	SECOA	SECOA	P				1		1	0	0	
Larry Lutz	Texas Scenic Company	Texas Scenic Company	P				1		1	0	0	
Michael Patterson	Theatre Projects Consultants	Theatre Projects Consultants	P		1				1			
Jerry Gorrell	Theatre Safety Programs	Theatre Safety Programs	P	1					1	0	0	
John C. Snook	Thermotex Industries Inc.	Thermotex Industries Inc.	P				1		0	0	0	
Jeff Wilkowski	Thern, Inc.	Thern, Inc.	P			1			1	0	0	
Tim Franklin	Theta-Consulting	Theta-Consulting	P	1					1			
Richard D. Thompson	Thompson Associates	Thompson Associates	P	1					0	0	0	
Brian Dowd	TMB (NJ)	TMB	P				1		1	0	0	
Keith Bohn	Tomcat USA, Inc.	Tomcat USA, Inc.	P			1			0	0	0	
John James	Tomcat USA, Inc.	Tomcat USA, Inc.	A			1			0	0	0	
Mitch Clark	Tomcat USA, Inc.	Tomcat USA, Inc.	A			1			0	0	0	
Peter Hind	Total Structures, Inc.	Total Structures, Inc.	P			1			0	0	0	
Doug Recher	Total Structures, Inc.	Total Structures, Inc.	A			1			0	0	0	
Ian Coles	Total Structures, Inc.	Total Structures, Inc.	A			1			0	0	0	
Peter Johns	Total Structures, Inc.	Total Structures, Inc.	A			1			0	0	0	
Hans van der Moolen	Stagemaker Division Europe	Verlinde Spa. France	P			1			1	0	0	
Pete Happe	Walt Disney Imagineering	Walt Disney	P		1				1	0	0	
Robin Crews	Wrightson, Johnson, Haddon & Williams, Inc.	Wrightson, Johnson, Haddon & Williams, Inc.	P	1					1	0	0	
				38 possible	11 G	7 U	10 MP	6 CP	4 DR	27 Yes	0 No	0 Abstain
				Votes by interest category								
				Yes	7	7	7	5	1			
				No	0	0	0	0	0			
				Abstain	0	0	0	0	0			

7.6E1.15 – Boom & base standard

Richard Nix moved that the proposed comment resolutions (Rig/2003-2015) for the first public review of BSR E1.15 be accepted and that the motion be decided by letter ballot. The motion was seconded.

[Note that this document and a revised set of proposed resolutions (Rig/2003-2015r1) from Richard Nix were sent to the voters in the Rigging Working Group. They were instructed to vote on the revised set.]

7.7E1.21 – Stage roofs standard

Tim Franklin reported on the progress being made on a first draft for the working group to consider. He said that they have a lot of comments from within the task group on the working document. They will meet at the concierge lounge tomorrow and will work on it. The group hopes to have a document ready for the working group by the ETS-LDI meeting.

7.8E1.22 – Fire curtains

Bill Conner reported that the first public review ended June 10. The task group is now in the process of drafting proposed resolutions to the comments. Some of the comments fundamentally challenge the way we have been making fire curtains for 100 years. The challenges to some of the tests used have raised fire engineering technical issues that go beyond the level of expertise in the task group now. Conner says they are working on getting people with more expertise in fire engineering involved in the project.

7.9Chain motor connector report

Brian Dowd read aloud a rough draft of a scope for a task group. The scope was discussed, and the response was generally favorable. The consensus was that the task group will work on refining the scope statement, and the working group will consider the way forward at the next meeting.

8 New business

None.

9 Other business

9.1 Portable temporary stage floors

Peter Hind was to give a presentation on this subject, but his flight was delayed and he did not make the meeting. Karl Ruling gave a precis of Hind's article in Protocol, which dealt with the problem of wind up-lift on the deck modules used for portable temporary stage floors.

9.2 OSHA and grids

Jerry Gorrell reported that he has hired an ex-OSHA inspector with nine years experience. His new employee noted that grid irons, as they are commonly built, don't meet the OSHA requirements for walking and working surfaces. The wells are narrow enough to be permitted, but they also would need a kickrail to be acceptable.

9.3 OSHA and fall protection

Karl Ruling reported that OSHA has reopened the rulemaking record on proposed revisions to Walking and Working Surfaces and Personal Protective Equipment (Fall Protection Systems) to gather data and information about advances in technology, changed work-practices, and updated consensus standards that have been issued since the proposals were first published (ten or more years ago). The announcement of the reopening of this rulemaking, which is Docket S-029, and a review of the rulemaking record is printed in the section of the *Federal Register* available at <http://a257.g.akamaitech.net/7/257/2422/02may20030800/edocket.access.gpo.gov/2003/pdf/03-10617.pdf>.

Comments are requested by 31 July 2003. Details of how to submit comments are included in the *Federal Register's* announcement, but the information there about electronic submissions is partially incorrect. Links at <http://ecomments.osha.gov> for Docket S-029 will take you to pages where you are invited to answer specific questions posed by OSHA about the rulemaking, but there is also a place for you to offer your own comments as you wish. The *Federal Register* says you can't send attachments, but, in fact, these comments must be submitted as uploaded files.

10 Schedule for future meetings

Mike Garl announced that the next meeting will be held in conjunction with the ETS-LDI trade show and will be on 19 November 2003 at 19:00 at the Sheraton World Resort in Orlando, Florida. IAAPA is going on at the same time as the trade show, so it will be important to book a room early.

The following meeting will be held the evening of Friday, 16 January 2004 at the Dallas/Ft. Worth Airport Marriott South in Ft., Worth Texas.

11 Changes of membership status resulting from lack of attendance.

Mike Garl announced that, with the conclusion of this meeting, the following principals and alternates had missed three meetings in a row, and had therefore not fulfilled the attendance requirement for voting members. They would now be listed as observers in the working group:

Robert Grenier Jr. and JoAnna Lloyd of Ocean State Rigging Systems Inc.
Michael Akrep of Polar Focus, Inc.
Peter Hind, Ian Coles, Peter Johns, and Doug Recher of Total Structures, Inc.

12 Adjournment

Pete Happe moved that the meeting adjourn. The motion was seconded. The motion was accepted by a unanimous voice vote. Mike Garl declared the meeting adjourned at 21:17.

Rigging Working Group Membership and Contact Information as of 2003-10-02

Name	Company	Representing (This is the sort field.)	Voting status	Int. cat.
Baer Long	Ninja Rigging	Act 1 Rigging Inc.	P	G
Andre Broucke	ADB - TTV Technologies	ADB-TTV Group	O	MP
Michael G. Wiener	Aerial Rigging & Leasing, Inc.	Aerial Rigging & Leasing, Inc.	P	U
Andy Sutton	AFX UK Ltd.	AFX UK Ltd.	O	U
William Conner	Schuler & Shook Inc.	Amer. Society of Theatre Consultants	P	U
Jim Fletcher	American Sling Company, Inc.	American Sling Company, Inc.	O	MP
Andrew T. Martin	ATM Group, Inc.	ATM Group, Inc.	P	MP
Dennis J. Lopez	Automatic Devices Co.	Automatic Devices Co.	O	MP
Buddy Braille	Bestek Lighting & Staging	Bestek Lighting & Staging	O	U
Lee J. Bloch	Blue Sky Design, Ltd.	Blue Sky Design, Ltd.	O	G
Eric Todd	BML Inc.	BML Inc.	O	MP
Paul Tardue	BML Inc.	BML Inc.	O	MP
Joachim Stoecker	CAMCO GmbH	CAMCO GmbH	O	MP
Mark M. Witteveen	Chicago Flyhouse Inc.	Chicago Flyhouse Inc.	O	U
Ted Jones	Chicago Spotlight, Inc.	Chicago Spotlight, Inc.	O	U
Don Dimitroff	Columbus McKinnon Corp.	Columbus McKinnon Corp.	P	MP
Wally Blount	Columbus McKinnon Corp.	Columbus McKinnon Corp.	A	MP
Ron Fogel	Creative Realities, Inc.	Creative Realities, Inc.	O	G
Jason Friedman	Creative Realities, Inc.	Creative Realities, Inc.	O	G
Harry Donovan	Donovan Rigging, Inc.	Donovan Rigging, Inc.	O	G
Wes Jenkins	Down Stage Right Industries	Down Stage Right Industries	O	CP
M. Brad Dittmer	Downhome Productions - Springfield, MO	Downhome Productions	P	U
F. Robert Bauer	F.R. Bauer & Associates, LLC	F.R. Bauer & Associates, LLC	P	G
Ben Hayes	Freedom Flying	Freedom Flying	O	G
Dean Hart	Stage Rigging, Inc.	Freeman Companies	O	U
Rocky Paulson	Stage Rigging, Inc.	Freeman Companies	O	DR
David M. Campbell	Geiger Engineers	Geiger Engineers	P	G
Paul Brady	Grand Stage Company, Inc.	Grand Stage Company, Inc.	O	U
Reid Neslage	H & H Specialties Inc.	H & H Specialties Inc.	P	MP
Delbert Hall	Hall Associates Inc.	Hall Associates Inc.	O	U
Jeffrey Hoffend	Hoffend & Sons, Inc.	Hoffend & Sons, Inc.	P	CP
Peter Hoffend	Hoffend & Sons, Inc.	Hoffend & Sons, Inc.	A	CP
Edwin S. Kramer	I.A.T.S.E., Local 1	I.A.T.S.E. Local 1	P	U
G. Anthony Phillips	I.A.T.S.E. Local 16	I.A.T.S.E. Local 16	O	U
Gregory C. Collis	I.A.T.S.E. Local 16	I.A.T.S.E. Local 16	O	G
Gian Carlo C. Bartolotti	Ibeam SP / Banco de Eventos	Ibeam SP / Banco de Eventos	O	U
Michael Keppler	Bogen	IFF	P	MP
Perry Langenstein	International Theatre Consultants	International Theatre Consultants	O	G
Rodney F. Kaiser	J.R. Clancy Inc.	J.R. Clancy, Inc.	P	CP
Jack Suesse	J.R. Clancy, Inc. (NC)	J.R. Clancy, Inc.	A	CP
Thomas S. Young	J.R. Clancy Inc.	J.R. Clancy, Inc.	A	CP
Mike Garl	James Thomas Engineering, Inc.	James Thomas Engineering, Inc.	P	MP
Tray Allen	James Thomas Engineering, Inc.	James Thomas Engineering, Inc.	A	MP
Jay O. Glerum	Jay O. Glerum & Associates, Inc.	Jay O. Glerum & Associates, Inc.	O	U
Chuck McClelland	Jeamar Winches Inc.	Jeamar Winches Inc.	O	MP
John Kaes	John Kaes	John Kaes	O	U
John R. Burgess	John R. Burgess	John R. Burgess	O	U
Edward Paget	Jones & Phillips Associates, Inc.	Jones & Phillips Associates, Inc.	P	G
Christopher Purpura	Jones & Phillips Associates, Inc.	Jones & Phillips Associates, Inc.	A	G
Nevin Kleege	Kleege Industries	Kleege Industries	O	U
William Beautyman	Limelight Productions, Inc.	Limelight Productions, Inc.	P	DR
Louis Bradfield	Louis Bradfield	Louis Bradfield	O	U
Harvey Sweet	LVH Entertainment Systems	LVH Electric, Inc.	P	DR
Kevin Dallmeyer	Mandalay Resort Group	Mandalay Resort Group	O	U
Michael L. Savage, Sr.	Middle Dept. Inspection Agency, Inc.	Middle Dept. Inspection Agency, Inc.	O	G
Charles E. Gorgen	Midwest Crane Corp.	Midwest Crane Corp.	O	MP
Kent H. Jorgensen	MPS Grips, Local 80	MPS Grips, Local 80	O	G
Bradford A. Kegel	National Production Services Inc.	National Production Services Inc.	O	U
Tracy Nunnally	Northern Illinois University	Northern Illinois University	O	U
Ted Hickey	OAP Audio Products	OAP Audio Products	O	MP
Tim Hansen	Oasis Stage Werks	Oasis Stage Werks	P	DR

Gary Justesen	Oasis Stage Werks	Oasis Stage Werks	O	U
Robert A. Grenier Jr.	Ocean State Rig-ging Systems Inc.	Ocean State Rig-ging Systems Inc.	O	DR
JoAnna Lloyd	Ocean State Rig-ging Systems Inc.	Ocean State Rig-ging Systems Inc.	O	DR
Olaf Soot	Olaf Soot Associates	Olaf Soot Associates	O	CP
Joseph Rapier	Parkhill, Smith & Cooper, Inc.	Parkhill, Smith & Cooper, Inc.	O	CP
Patrick Stansfield	Patrick Stansfield Assoc., Inc.	Patrick Stansfield Assoc., Inc.	O	U
John Jones	PCM/Pfaff Silberblau Ltd.	PCM/Pfaff Silberblau Ltd.	O	DR
Richard J. Nix	Performance Systems Integration	Performance Systems Integration	P	G
Peter Letzelter-Smith	Peter Letzelter-Smith	Peter Letzelter-Smith	O	U
Billy Phillips	Phillips Rigging	Phillips Rigging	O	CP
Ron Bonner	PLASA	PLASA	P	G
Tony Douglas-Beveridge	PLASA	PLASA	A	G
Michael Akrep	Polar Focus, Inc.	Polar Focus, Inc.	O	MP
Marc Hendriks	Prolyte	Prolyte	O	MP
Douglas Franz	QVC Network	QVC Network	O	U
Scott Mohr	R&R Cases and Cabinets	R&R Cases and Cabinets	O	G
Michael Reed	Reed Rigging, Inc.	Reed Rigging, Inc.	O	U
Rinus Bakker	Rhino Rigs B.V.	Rhino Rigs B.V.	O	G
Rikki Newman	Rikki Newman	Rikki Newman	O	U
Randall W. A. Davidson	Risk International & Associates, Inc.	Risk International & Associates, Inc.	O	U
Roo Dunn	Pennsylvania Convention Center	Roo Dunn	O	U
Heinz Siller	RST Prsentations-systeme	RST Prsentations-systeme	O	G
Thomas M. Granucci	Associated Students, Cox Arena	San Diego State University	O	U
Bill Sapsis	Sapsis Rigging, Inc.	Sapsis Rigging, Inc.	P	U
Peter A. Scheu	Scheu Consulting Services	Scheu Consulting Services	P	G
Dan Culhane	SECOA	SECOA	P	CP
Jerald Kraft	SECOA	SECOA	A	CP
Luigi Sbalzarini	Selvolina SNC	Selvolina SNC	O	MP
Robert Barbagallo	Solotech Inc.	Solotech Inc.	O	DR
Jon Lagerquist	South Coast Repertory	South Coast Repertory	O	U
Jerrold S. Tiers	St. Louis Music Inc.	St. Louis Music Inc.	O	MP
Shawn Nolan	Entertainment Structures Group	Steven Schafer Associates	O	G
Reuben Goldberg	Technic Services	Technic Services	O	U
Deborah Sperry	Tent Tec	Tent Tec & Sperry Events, Inc.	O	MP
Larry Lutz	Texas Scenic Company	Texas Scenic Company	P	CP
Richard C. Mecke	Texas Scenic Company	Texas Scenic Company	O	CP
Alan Broadhurst	The Broadhurst Partnership	The Broadhurst Partnership	O	P
Michael Patterson	Theatre Projects Consultants, Inc.	Theatre Projects Consultants	P	U
Jerry Gorrell	Theatre Safety Programs	Theatre Safety Programs	P	G
Ed Nicholas	Theatrical Lighting Systems, Inc.	Theatrical Lighting Systems, Inc.	O	DR
John Van Lennep	Theatrix Inc.	Theatrix Inc.	O	DR
John C. Snook	Thermotex Industries Inc.	Thermotex Industries Inc.	P	CP
Jeff Wilkowski	Thern, Inc.	Thern, Inc.	P	MP
Tim Franklin	Theta-Consulting	Theta-Consulting	P	G
Thomas Paterson	Thomas Paterson	Thomas Paterson	O	G
Richard D. Thompson	Thompson Associates	Thompson Associates	P	G
Brian Dowd	TMB (NJ)	TMB	P	CP
Keith Bohn	Tomcat USA, Inc.	Tomcat USA, Inc.	P	MP
Mitch Clark	Tomcat USA, Inc.	Tomcat USA, Inc.	A	MP
John James	Tomcat USA, Inc.	Tomcat USA, Inc.	A	MP
Ian Coles	Total Structures, Inc.	Total Structures, Inc.	O	MP
Peter Hind	Total Structures, Inc.	Total Structures, Inc.	O	MP
Peter Johns	Total Structures, Inc.	Total Structures, Inc.	O	MP
Doug Recher	Total Structures, Inc.	Total Structures, Inc.	O	MP
Hans van der Moolen	Stagemaker Division Europe	Verlinde Spa. France	P	MP
Eckart Steffens	SOUNDLIGHT	VPLT	O	G
Hank Miller	W.E. Palmer Co.	W.E. Palmer Co.	O	CP
Rand Goddard	W.E. Palmer Co.	W.E. Palmer Co.	O	CP
Pete Happe	Walt Disney Imagineering	Walt Disney	P	U
Warren A. Bacon	Warren A. Bacon	Warren A. Bacon	O	U
Melvin Wierenga	Wierenga & Assoc.	Wierenga & Assoc.	O	DR
Robin Crews	Wrightson, Johnson, Haddon & Williams, Inc.	Wrightson, Johnson, Haddon & Williams, Inc.	P	G
Ray Robins	XS Lighting, Inc.	XS Lighting, Inc.	O	CP
Robert Dean	ZFX Inc.	ZFX Inc.	O	CP

Key to codes: P principal voting member
A alternate voting member
I individual voting member
O observer, non-voting

MP mass-market producer interest category
CP custom-market producer interest category
DR dealer or rental company interest category
U user interest category
G general-interest interest category