

Minutes
Rigging Working Group
Tuesday, 13 October 2020
via WebEx

Presiding working group leader: Bill Sapsis; Sapsis Rigging

Recording secretaries: Richard Nix and Karl Ruling; ESTA

Members attending:

Jacob Abbott; PSAV Presentation Services; O; U
Jesse Adams; Rose Brand Wipers, Inc; P; DR
William Ian Auld; Auld Entertainment; O; U
Dana Bartholomew; Silver State Wire Rope and Rigging; P; DR
Peter W. Batt; Mainstage Theatrical Supply, Inc; P; DR
Drew Becker; InterAmerica Stage, Inc.; A; CP
Bennett Brian; Reed Rigging Inc.; P; DR
Paul Brunner; Thern, Inc.; A; MP
Lee Chuong; Walt Disney Company; A; DE
Jay Cid; R&M Materials Handling / Stagemaker; P; MP
Dan Culhane; Wenger Corp.; A; CP
Bruce Darden; InterAmerica Stage, Inc.; P; CP
Robert Dean; ZFX, Inc.; O; CP
Jonathan Deull; JSD Projects LLC; P; U
Tony Diemont; Texas Scenic Company; P; DR
Don Earl; Earl Girls, Inc.; P; DR
Mike Garl; Mike Garl Consulting LLC; P; DE
Siobhan Gee; Siobhan Gee; I; G
Ethan W Gilson; Entertainment Rigging Services, LLC; P; U
Sanford P. Gilzow; Shur-Rig LLC; P; G
Joe Golden; Gallagher Staging & Productions; P; DR
William B. Gorlin; M.G. McLaren, P.C.; P; G
Jerry Gorrell; Theatre Safety Programs; P; G
Rod Haney; I.A.T.S.E. Local 891; P; U
Tim Hansen; Oasis Stage Werks; P; DR
Robert Haycock; UC Berkeley; I; U
Jeremy Hodgson; Jeremy Hodgson; I; G
Joseph Jeremy; Show Distribution Group, Inc.; P; CP
Christine L. Kaiser; Syracuse Scenery & Stage Lighting Co., Inc.; P; DR
Edwin S. Kramer; I.A.T.S.E. Local 1; P; U
Kyle Kusmer; Steven Schaefer Associates, Inc; P; DE
Kalen Larson; ZFX, Inc.; P; CP
Ed Leahy; Chicago Flyhouse, Inc; P; CP
Paul "Luke" Lewkowicz; Paul E Lewkowicz PC; O; DE
Daniel H. Louis; Theta Consulting LLC; P; G
Mike Merz; Steven Schaefer Associates; A; DE
Sam Michael; Thern, Inc.; P; MP
Orestes Mihaly; Production Resource Group; P; DR
Rick Montgomery; Motion Laboratories, Inc.; P; MP
Jim Niesel; Theatre Projects Consultants, Inc.; P; DE
Richard J. Nix; Richard J. Nix; I; G
Richard J. Nix; ESTA; exf; G
Tracy Nunnally; Vertigo; P; CP
Matt Panther; Reliable Design Services; A; CP
Stefan Pries; NEP Live Events; P; DR

John Ringelman; Freeman Companies; P; DR
Eric Rouse; Entertainment Project Services, LLC; P; CP
Karl G. Ruling; ESTA; exf; G
Bill Sapsis; Sapsis Rigging, Inc.; P; U
Chris Schmidt; Freeman Companies; A; DR
Steven Serafin; The Hartford Group; P; G
Mike Skinner; Contract Services Administration Trust Fund; P; U
Stewart Stephens; S2 Technologies; P; G
Ken Tilson; Columbus McKinnon Corp.; P; MP
Will Todd; Area Four Industries; P; MP
Troy Trinkle; Troy Trinkle, LLC; P; CP
Elmer Veith; Reliable Design Services; P; CP
Nathan Villines; Tyler Truss Systems; P; MP
Steve Walker; Steve A. Walker & Associates; P; G
Michael Wells; Xtreme Structures and Fabrication; P; MP
R. Duane Wilson; Amer. Society of Theatre Consultants; P; DE
Max A. Wilson; Applied Electronics; P; MP
Allen Winzler; Entertainment and Rigging Engineering.; P; DE
Stephan Jon Wood; Tait Towers Manufacturing LLC; P; CP
Andrew Young; Andrew Young; O; U

1 Opening Remarks

Bill Sapsis called the meeting to order at 14:05. He welcomed all and thanked everyone for their effort and time. He reminded people to mute their microphones when not speaking. He reviewed the voting system. It is easier to count No votes and abstentions, rather than Yes votes; he will be asking for objections and abstentions and will be assuming that all voters not objecting or abstaining are voting Yes.

2 Patent and anti-trust statements

2.1 Reading of the anti-trust statement

Bill Sapsis read the following statement aloud to the assembly:

ESTA and its members take seriously their obligation to comply with all applicable antitrust laws. Therefore, during this meeting and during all ESTA 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 or will not 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 an ESTA meeting, please bring your concern to ESTA management. An easy to read pamphlet describing the antitrust laws is available from the ESTA staff.

Karl Ruling displayed the pamphlet in front of his camera for the participants to see.

No restraint of trade problems were reported.

2.2 Reading of the call for patents

Bill Sapsis read the following statement aloud to the assembly:

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

3 Attendance and Membership

3.1 Requirements for membership

Bill Sapsis read the following statement aloud to the assembly:

Membership is open to all parties who are affected by the work of the group; membership in ESTA is not a requirement, but there is a \$100/person/year participation fee to help fund the costs of running the Technical Standards Program. Voting members are required to attend meetings and vote on letter ballots. Any principal member and alternate that both miss three consecutive meetings or that miss three consecutive letter ballots will have their membership status changed to observer. This action will be taken at the beginning of the first meeting after such inaction and will be recorded in the minutes of that meeting.

Richard Nix said that the TSP fee reminders had been sent, and asked that anyone who has not yet paid to please do so, and that anyone who had joined but had not received an invoice yet to please contact him. He also said that we had recently migrated to a new database, so a few people may receive invoice reminders in error. He asked that if anyone receiving a reminder who had already paid to please let him know so the records can be corrected.

3.2 Introduction of attendees

3.3 Determination of a quorum

Richard Nix determined that enough voters were present to pass a motion needing a supermajority.

3.4 Processing of new membership and status change requests

The following applications or status change requests have been received:

Siobhan Gee; Siobhan Gee; I; G
Troy Trinkle, Troy Trinkle, LLC; P; CP
Allen A Winzler; Entertainment and Rigging Engineering; P; DE
Stefan Pries; Creative Technology Group; P; DR

Ethan Gilson moved to accept the applications. The motion was seconded and carried with no objections or abstentions.

3.5 Changes to observer status due to lack of attendance or missed letter ballots

3.5.1 Attendance notices

The following voters have missed two consecutive meetings, and their status will be changed to that of Observer if this meeting is missed:

*Ken Tilson; Columbus McKinnon Corp.
Nick Fleming; Columbus McKinnon Corp.
Rod Haney; I.A.T.S.E. Local 891
Ross Long; I.A.T.S.E. Local 891
Marty Wesstrom; Mountain Productions, Inc Not present.
Tim Hansen; Oasis Stage Werks*

All were present, except for Marty Wesstrom. He was moved to observer status.

3.5.2 Letter ballot notices

People were reminded that responding to letter ballots is a requirement for voting status. The following voters have missed the last two letter ballots and will be moved to Observer status if the next letter ballot is missed.

Jim Niesel; Theatre Projects Consultants, Inc.
 Bartholomew J. Mueller; Recreation Engineering Inc.
 Tony Diemont; Texas Scenic Company
 Russell Solomon; Texas Scenic Company

3.5.3 Automatic status changes occurring before this meeting

The following status changes have occurred since the last meeting. These delegates have been moved to observer status due to missed letter ballots.

Carlos Ortega; PSAV Presentation Services
 Demian Purdy; PSAV Presentation Services
 Jacob Abbott; PSAV Presentation Services

3.6 Consensus body

The consensus body during the meeting is:

Delegate	Representing	Voting status	Int. category
Ryan Riordan	Accurate Staging, Inc.	P	CP
R. Duane Wilson	Amer. Society of Theatre Consultants	P	DE
Max A. Wilson	Applied Electronics	P	MP
Jon Lenard	Applied Electronics	A	MP
Will Todd	Area Four Industries	P	MP
Keith Bohn	Area Four Industries	A	MP
Ed Leahy	Chicago Flyhouse, Inc	P	CP
Ken Tilson	Columbus McKinnon Corp.	P	MP
Nick Fleming	Columbus McKinnon Corp.	A	MP
Mike Skinner	Contract Services Administration Trust Fund	P	U
Chris Moulton	Contract Services Administration Trust Fund	A	U
Don Earl	Earl Girls, Inc.	P	DR
Steven Ricks	Electronic Theatre Controls, Inc.	P	MP
Michael Lichter	Electronic Theatre Controls, Inc.	A	MP
Allen Winzler	Entertainment and Rigging Engineering.	P	DE
Eric Rouse	Entertainment Project Services, LLC	P	CP
Joseph Champelli	Entertainment Project Services, LLC	A	CP
Joshua "Fritz" Friedensohn	Entertainment Project Services, LLC	A	CP
Ethan W Gilson	Entertainment Rigging Services, LLC	P	U
John Ringelman	Freeman Companies	P	DR
Chris Schmidt	Freeman Companies	A	DR
Joe Golden	Gallagher Staging & Productions	P	DR
Miriam Paschetto	Geiger Engineers	P	DE
Reid Neslage	H & H Specialties Inc.	P	MP
Pat Grenfell	Hoist Sales & Service	P	DR
Edwin S. Kramer	I.A.T.S.E. Local 1	P	U

Delegate	Representing	Voting status	Int. category
Rod Haney	I.A.T.S.E. Local 891	P	U
Ross Long	I.A.T.S.E. Local 891	A	U
Bruce Darden	InterAmerica Stage, Inc.	P	CP
Drew Becker	InterAmerica Stage, Inc.	A	CP
Jeremy Hodgson	Jeremy Hodgson	I	G
Jonathan Deull	JSD Projects LLC	P	U
William B. Gorlin	M.G. McLaren, P.C.	P	G
Peter W. Batt	Mainstage Theatrical Supply, Inc	P	DR
Mike Garl	Mike Garl Consulting LLC	P	DE
Rick Montgomery	Motion Laboratories, Inc.	P	MP
Mike Webb	Motion Laboratories, Inc.	A	MP
Michael Shaw	Motion Laboratories, Inc.	A	MP
Stefan Pries	NEP Live Events	P	DR
Tim Hansen	Oasis Stage Werks	P	DR
Orestes Mihaly	Production Resource Group	P	DR
Ryan Roby	Production Resource Group	A	DR
Jay Cid	R&M Materials Handling / Stagemaker	P	MP
Bartholomew J. Mueller	Recreation Engineering Inc.	P	DE
Bennett Brian	Reed Rigging Inc.	P	DR
Elmer Veith	Reliable Design Services	P	CP
Matt Panther	Reliable Design Services	A	CP
Richard J. Nix	Richard J. Nix	I	G
Shawn Nolan	Rimkus Consulting Group, Inc	P	G
Jesse Adams	Rose Brand Wipers, Inc	P	DR
Stewart Stephens	S2 Technologies	P	G
Bill Sapsis	Sapsis Rigging, Inc.	P	U
Joseph Jeremy	Show Distribution Group, Inc.	P	CP
Bill McIntyre	Show Distribution Group, Inc.	A	CP
Sanford P. Gilzow	Shur-Rig LLC	P	G
Dana Bartholomew	Silver State Wire Rope and Rigging	P	DR
Siobhan Gee	Siobhan Gee	I	G
Steve Walker	Steve A. Walker & Associates	P	G
Kyle Kusmer	Steven Schaefer Associates, Inc	P	DE
Mike Merz	Steven Schaefer Associates, Inc	A	DE
Christine L. Kaiser	Syracuse Scenery & Stage Lighting Co., Inc.	P	DR
Harold Ike Shippers	Syracuse Scenery & Stage Lighting Co., Inc.	A	DR

Delegate	Representing	Voting status	Int. category
Jason Tello	T6 Truss Designs. LLC	P	CP
Tracie Allen	T6 Truss Designs. LLC	A	CP
Stephan Jon Wood	Tait Towers Manufacturing LLC	P	CP
David Bond	Tait Towers Manufacturing LLC	A	CP
Ryan Kunkel	Tait Towers Manufacturing LLC	A	CP
Tony Diemont	Texas Scenic Company	P	DR
Russell Solomon	Texas Scenic Company	A	DR
Steven Serafin	The Hartford Group	P	G
Jim Niesel	Theatre Projects Consultants, Inc.	P	DE
Jerry Gorrell	Theatre Safety Programs	P	G
Sam Michael	Thern, Inc.	P	MP
Jeff Wilkowski	Thern, Inc.	A	MP
Paul Brunner	Thern, Inc.	A	MP
Daniel H. Louis	Theta Consulting LLC	P	G
Troy Trinkle	Troy Trinkle, LLC	P	CP
Nathan Villines	Tyler Truss Systems	P	MP
Bill Edwards	Tyler Truss Systems	A	MP
Josh Conner	Tyler Truss Systems	A	MP
Robert Haycock	UC Berkeley	I	U
Tracy Nunnally	Vertigo	P	CP
John P. Moore	Vertigo	A	CP
Ian Bevan	Walt Disney Company	P	DE
Lee Chuong	Walt Disney Company	A	DE
Peter V. Svitavsky	Wenger Corp.	P	CP
Dan Culhane	Wenger Corp.	A	CP
Paul Zagajeski	Wenger Corp.	A	CP
Michael Wells	Xtreme Structures and Fabrication	P	MP
Mark Newlin	Xtreme Structures and Fabrication	A	MP
Theresa Lovell	Xtreme Structures and Fabrication	A	MP
Kalen Larson	ZFX, Inc.	P	CP
	Total votes possible	61	

Votes by interest categories	
12	CP
10	MP
13	DR
7	U
11	G
8	DE

4 Approval of the minutes from the last meeting

[See *RWGmin07-2020_R1_DRAFT.pdf*]

Bruce Darden moved we accept the draft minutes as written. The motion was seconded. No one was opposed. There were no abstentions. The motion carried.

5 Approval of agenda

Dan Culhane moved we accept the agenda as written. The motion was seconded. No one was opposed. There were no abstentions. The motion carried.

6 Old Business

6.1 ANSI E1.1 – 2018, wire rope ladders (Revise, reaffirm or withdrawal by 27 September 2023)

No news or action.

6.2 BSR E1.2 - 20xx, Entertainment Technology - Design, Manufacture and Use of Aluminum Trusses and Towers (Last published in 2012 – Open for revision). *Task group members:* Mike Garl (leader), Jacob Abbott, Keith Bohn, Jerry Gorrell, Jason Tello, Will Todd, Richard Nix, and Elmer Veith.

[See *BSRE1-2_LtrBallotCmmntResp_Draft.pdf* and *BSR E1-2_201x_Rig2019-2022r2.pdf*]

The task group has provided a draft resolution to the letter ballot comments, with an updated draft revision.

Mike Garl reported. He moved that the letter ballot comment resolutions be accepted. The motion was seconded. There was no discussion. No one was opposed. There were no abstentions. The motion carried with the required supermajority.

Garl said the resolutions are substantive, so he moved that the revised draft be offered for public review. The motion was seconded. No one was opposed. There were no abstentions. The motion carried.

6.3 ANSI E1.4-1 - 2016, Entertainment Technology--Manual Counterweight Rigging Systems (Revise, reaffirm, or withdrawal by 11 October 2021)

Richard Nix moved that ANSI E1.4-1 be opened for revision. The motion was seconded. No one was opposed. There were no abstentions. The motion carried. A PINS form will be filed with ANSI.

Peter Batt asked that he be allowed to work on the document. The task group was established as:

- Bruce Darden
- Dan Culhane
- Eric Rouse
- Jim Niesel
- Pat Grenfell
- Peter Batt
- Peter Scheu

Reid Neslage
Richard Nix (project leader)
Sam Michael
Ted Jones

6.4 BSR E1.4-2 - 202x, Entertainment Technology—Statically Suspended Rigging Systems

Task group members: Bart Mueller (leader) Ethan Gilson, Ted Jones, Jesse Adams, Brad Dittmer, and Peter Batt
[See BSR_E1-4-2_PR4_CmmntSmmry.pdf]

A summary of the fourth public review, which ended on 21 September 2020, has been sent to the working group.

Bart Mueller reported that comments had been received. He will set up a task group meeting to review the comments and to draft resolutions. He thinks that the comment resolutions will result in non-substantive changes. He hopes to have a comment resolution document for consideration at the working group's January meeting.

6.5 ANSI E1.4-3 - 2020, Entertainment Technology - Manually Operated Hoist Rigging Systems (Reaffirm, revise, or withdraw before 02 June 2025)

Sapsis suggested no action on this now.

6.6 ANSI E1.6-1 - 2019, Entertainment Technology--Powered Hoist Systems *Task group members:* Bill Gorlin (leader), Steve Walker, Eric Rouse, Pete Svitavsky, Shawn Nolan, and Chris Kaiser

The motion has carried through the TSC and is now in Executive Committee letter ballot.

Richard Nix reported that the Exec Comm ballot was recently issued. No ballots had been returned yet.

6.7 ANSI E1.6-2 - 2020, Entertainment Technology--Design, Inspection, and Maintenance of Electric Chain Hoists for the Entertainment Industry

Task group members: Ken Tilson, John Ringelman, Ben Brian, Marty Westrom, Rick Montgomery, Chris Schmidt, Mike Weston, Sandy Gilzow, Jack Gallagher, and Elmer Veith (leader)

It's published! No further news.

6.8 ANSI E1.6-3 - 2019, Selection and Use of Serially Manufactured Chain Hoists in the Entertainment Industry (Revise, reaffirm or withdraw 07 October 2024)

No news. Bill Sapsis suggested no action on this now.

6.9 BSR E1.6-4 - 202x, Design, Manufacture, and Inspection of Portable Controls for Electric Chain Hoists in the Entertainment Industry (Last published in 2013 – Open for revision)

Task group members: David Bond, Rod Haney, Rick Montgomery, John Ringelman, Elmer Veith, Jem Hodgson, Stephen Wood, Mike Webb, and Joe Jeremy (leader).

Joe Jeremy reported that the task group had met and made some changes to this draft and to the new E1.6-5. He said he hopes to have a draft of both done for the January meeting.

6.10 BSR E1.6-5, Selection and Use of Portable Controls for Electric Chain Hoists in the Entertainment Industry

Task group members: David Bond, Rod Haney, Rick Montgomery, John Ringelman, Elmer Veith, Jem Hodgson, Stephen Wood, Mike Webb, and Joe Jeremy (leader).

See the item 6.9 report above. The task group is working on both documents in parallel.

6.11 ANSI E1.8 – 2018, Entertainment Technology—Loudspeaker Enclosures Intended for Overhead Suspension—Classification, Manufacture and Structural Testing (Revise, reaffirm or withdrawal by 29 November 2023)

No news or action at this time.

6.12 ANSI E1.15 - 2006 (R2016), Entertainment Technology--Recommended Practices and Guidelines for the Assembly and Use of Theatrical Boom & Base Assemblies (revision, reaffirmation, or withdrawal by 23 September 2021)

Richard Nix moved that the standard be reaffirmed, but with the public review to be before the letter ballot rather than concurrently. (The working group vote would be after the public review, after any public comments had been gathered.) The motion was seconded. The motion carried unanimously, with no opposition or abstentions.

6.13 ANSI E1.21 - 2020, Entertainment Technology — Temporary Structures Used for Technical Production of Outdoor Entertainment Events (Reaffirm, revise, or withdraw before 23 March 2025)

No news or action at this time.

6.14 ANSI E1.22 - 2016, Entertainment Technology - Fire Safety Curtain Systems (Revise, reaffirm, or withdrawal by 11 October 2021)

No news or motions affecting the standard at this time, but Bill Sapsis asked people to look at it so they have opinions.

Dan Culhane asked to be the leader of the task group for whatever the project might be for this standard. The task group for this future project was set as Dan Culhane, Drew Becker, Tracy Nunnally, Sam Michael, and Jim Niesel.

6.15 BSR E1.39 - 202x, Entertainment Technology –Selection and Use of Personal Fall Arrest Systems on Portable Structures Used in the Entertainment Industry (Open for revision)

Task group members: Chris Schmidt, Ethan Gilson (leader), Will Todd, Dana Bartholomew, Shawn Nolan, Rod Haney, Mike Wells, Allen Winzler, and Bill Sapsis.

[See [BSR_E1-39_PR1CmmntResols reply 7.14.2020.pdf](#), and [BSR_E1-39-202x_Rig2009-2107r9.pdf](#)]

Proposed comment resolutions and a revised draft have been distributed to the working group.

Ethan Gilson reported on the progress made with the comment resolutions. He moved that the comment resolutions be accepted. The motion was seconded. The motion was accepted by the required supermajority with none opposed and no abstentions.

Ethan Gilson moved to offer the revised draft standard for public review. The motion was seconded. The motion was accepted with none opposed and no abstentions.

6.16 ANSI E1.43 - 2016, Live performer flying effect standard (Open for revision)

Task group members: Eric Rouse (task group leader), Jonathan Duell, Ryan Kunkel, Robert Dean, Tracy Nunnally, Bill Gorlin, Fred Caron, and Stewart Stephens

Eric Rouse reported no progress on the document, but he has organized a schedule of task group meetings. The task group will next meet on October 26, and then biweekly after that.

6.17 Rigging Glossary

No news, reported Chris Kaiser.

6.18 ANSI E1.47 – 2020, Recommended Guidelines for Entertainment Rigging System Inspections

(Reaffirm, revise or withdraw before 18 June 2025)

No news or action.

6.19 ANSI E1.50-1 – 2017, Requirements for the Structural Support of Temporary LED, Video & Display Systems (Revision, reaffirmation, or withdrawal by 14 August 2022)

No news or action.

6.20 ANSI E1.56 - 2018, Rigging Support Points Design, Fabrication, Installation, and Testing (Revision, reaffirmation or withdrawal by 06 November 2023)

No news or action.

6.21 BSR E1.67 – 202x, Design, Inspection, Maintenance, Selection, and Use of Hand-operated Chain- and Lever Hoists for the Entertainment Industry

Task group members: Mike Weston, Jacob Abbott (leader), Dana Bartholomew; and Charlie Weiner, John Ringleman, Elmer Veith

[See [BSR_E1-67-202x_R0-2.pdf](#)]

No public review comments were received during the first review, but the draft document has been revised, and has been distributed to the working group for consideration.

Jacob Abbot moved to offer the revised draft for public review. The motion was seconded. The motion was accepted with none opposed and no abstentions.

6.22 BSR E1.70 – 202x, Selection and Use of Ground Supported Winch Stands and Towers in the Entertainment Industry

Jacob Abbott, Ethan Gilson (task group leader), Eric Rouse, Will Todd, Elmer Veith, Ryan Riordan, and Max Wilson

Ethan Gilson reported that they have an email reflector, but have made no progress yet.

7 New business

None.

8 Other business and announcements

8.1 Above & Beyond Awards

Bill Sapsis said that Michael Lay has asked working group leaders to remind people of the Above & Beyond Awards. Information about them may be found at http://tsp.esta.org/tsp/news/award_recipients.html. The nomination site is open year round, and the award is designed for members to highlight the work of their peers. The website says nominations for this year are due November 1. The awards will be presented at the beginning of next year.

9 Schedule for future meetings

The meeting schedule may be found at <http://www.esta.org/ESTA/meetings.php>.

Karl Ruling noted that there is nothing listed past this October meeting cycle, but he anticipates us having meetings in January. The meetings will be via WebEx

10 Adjournment

Having reached the end of the agenda, Bill Sapsis declared the meeting adjourned at 14:50. He thanked everyone for attending.

Rigging Working Group members as of 15 October 2020

Delegate	Representing	Voting status	Int. cat.
Jacob Abbott	PSAV Presentation Services	O	U
Jesse Adams	Rose Brand Wipers, Inc	P	DR
Tracie Allen	T6 Truss Designs. LLC	A	CP
Matthew Antonucci	Contract Services Administration Trust Fund	O	U
Brent Armstrong	Alpine Rigging & Structural Design	O	CP
William Ian Auld	Auld Entertainment	O	U
Robert Barbagallo	Solotech Inc.	O	DR
Dana Bartholomew	Silver State Wire Rope and Rigging	P	DR
Peter W. Batt	Mainstage Theatrical Supply, Inc	P	DR
William Beautyman	Limelight Productions, Inc.	O	DR
Drew Becker	InterAmerica Stage, Inc.	A	CP
Justin Bennett	University of the Incarnate Word	O	U
Ian Bevan	Walt Disney Company	P	DE
Roy Bickel	Roy Bickel	O	G
Tyler Bland	Walt Disney Company	O	U
Keith Bohn	Area Four Industries	A	MP
David Bond	Tait Towers Manufacturing LLC	A	CP
William Bradburn	Aerial Arts, Inc.	O	U
Bennett Brian	Reed Rigging Inc.	P	DR
Paul Brunner	Thern, Inc.	A	MP
David M. Campbell	Geiger Engineers	O	G
Frederic Caron		O	U
Joseph Champelli	Entertainment Project Services, LLC	A	CP

Rigging Working Group members as of 15 October 2020

Delegate	Representing	Voting status	Int. cat.
Lee Chuong	Walt Disney Company	A	DE
Jay Cid	R&M Materials Handling / Stagemaker	P	MP
Daniel J. Clark	Clark-Reder Engineering, Inc.	O	G
Benjamin Cohen	Chicago Flyhouse Inc.	O	CP
Josh Conner	Tyler Truss Systems	A	MP
Brandon Cox	Heavyweight Solutions	O	CP
Dan Culhane	Wenger Corp.	A	CP
Bruce Darden	InterAmerica Stage, Inc.	P	CP
David Darland	PSAV Presentation Services	O	U
Robert Dean	ZFX, Inc.	O	CP
Jonathan Deull	JSD Projects LLC	P	U
Tony Diemont	Texas Scenic Company	P	DR
Jim Digby	Event Safety Alliance	O	U
Brad Dittmer	Stage Labor of the Ozarks	O	U
Russ Dusek	I Weiss	O	MP
Don Earl	Earl Girls, Inc.	P	DR
Bill Edwards	Tyler Truss Systems	A	MP
Jennifer Ferguson	Kito Group	O	MP
Nick Fleming	Columbus McKinnon Corp.	A	MP
Tim Franklin	Theta Consulting LLC	O	G
Joshua "Fritz" Friedensohn	Entertainment Project Services, LLC	A	CP
Mike Garl	Mike Garl Consulting LLC	P	DE
James M. Garner	Walt Disney Company	O	G
Siobhan Gee	Siobhan Gee	I	G

Rigging Working Group members as of 15 October 2020

Delegate	Representing	Voting status	Int. cat.
Ethan W Gilson	Entertainment Rigging Services, LLC	P	U
Sanford P. Gilzow	Shur-Rig LLC	P	G
Joe Golden	Gallagher Staging & Productions	P	DR
William B. Gorlin	M.G. McLaren, P.C.	P	G
Jerry Gorrell	Theatre Safety Programs	P	G
Michael P. Gosenski	Rigging Systems LLC	O	U
Erin Grabe	ESTA	exf	G
Pat Grenfell	Hoist Sales & Service	P	DR
Phillip R. Hampton	Charcoalblue	O	DE
Rod Haney	I.A.T.S.E. Local 891	P	U
Tim Hansen	Oasis Stage Werks	P	DR
Sean Harding	Port Lighting Systems	O	G
Robert Haycock	UC Berkeley	I	U
Chris Higgs	Total Solutions Group	O	G
Jeremy Hodgson	Jeremy Hodgson	I	G
Donald Hoffend_III	Avista Designs, LLC	O	G
Cedric Jackson	Screen Actors Guild - American Federation of Television & Radio Artists	O	G
Joseph Jeremy	Show Distribution Group, Inc.	P	CP
Ted Jones	Grand Stage	O	U
Christine L. Kaiser	Syracuse Scenery & Stage Lighting Co., Inc.	P	DR
Jerald Kraft	JTH Lighting Alliance	O	CP
Edwin S. Kramer	I.A.T.S.E. Local 1	P	U
Ryan Kunkel	Tait Towers Manufacturing LLC	A	CP
Kyle Kusmer	Steven Schaefer Associates, Inc	P	DE

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Delegate	Representing	Voting status	Int. cat.
Kalen Larson	ZFX, Inc.	P	CP
Ed Leahy	Chicago Flyhouse, Inc	P	CP
Jon Lenard	Applied Electronics	A	MP
Phillip Lewis	Tait Towers Manufacturing LLC	O	CP
Paul "Luke" Lewkowicz	Paul E Lewkowicz PC	O	DE
Michael Lichter	Electronic Theatre Controls, Inc.	A	MP
Ross Long	I.A.T.S.E. Local 891	A	U
Jacob E. Loretto	Musson Theatrical Inc.	O	DR
Daniel H. Louis	Theta Consulting LLC	P	G
Theresa Lovell	Xtreme Structures and Fabrication	A	MP
Wendy Manson		O	G
Bill McIntyre	Show Distribution Group, Inc.	A	CP
Mike Merz	Steven Schaefer Associates, Inc	A	DE
Sam Michael	Thern, Inc.	P	MP
Steven Michelman	Entertainment Project Services, LLC	O	CP
Orestes Mihaly	Production Resource Group	P	DR
Rick Montgomery	Motion Laboratories, Inc.	P	MP
John P. Moore	Vertigo	A	CP
Chris Moulton	Contract Services Administration Trust Fund	A	U
Bartholomew J. Mueller	Recreation Engineering Inc.	P	DE
John Neal	Rhino Staging	O	G
Reid Neslage	H & H Specialties Inc.	P	MP
Mark Newlin	Xtreme Structures and Fabrication	A	MP
Jim Niesel	Theatre Projects Consultants, Inc.	P	DE

Rigging Working Group members as of 15 October 2020

Delegate	Representing	Voting status	Int. cat.
Richard J. Nix	Richard J. Nix	I	G
Richard J. Nix	ESTA	exf	G
Shawn Nolan	Rimkus Consulting Group, Inc	P	G
Tracy Nunnally	Vertigo	P	CP
Carlos Ortega	PSAV Presentation Services	O	U
Gregory Orth	WNP Services, Inc.	O	DR
Matt Panther	Reliable Design Services	A	CP
Miriam Paschetto	Geiger Engineers	P	DE
Kurt Pragman	Pragman Associates, LLC	O	G
Stefan Pries	NEP Live Events	P	DR
Demian Purdy	PSAV Presentation Services	O	U
Luke Ricca	Luke Ricca	O	G
Steven Ricks	Electronic Theatre Controls, Inc.	P	MP
Mark Riddlesperger	LA ProPoint, Inc.	O	CP
John Ringelman	Freeman Companies	P	DR
Ryan Riordan	Accurate Staging, Inc.	P	CP
Ryan Roby	Production Resource Group	A	DR
Eric Rouse	Entertainment Project Services, LLC	P	CP
Karl G. Ruling	ESTA	exf	G
Tim Salamon	PSAV Presentation Services	O	DR
Bill Sapsis	Sapsis Rigging, Inc.	P	U
Peter A. Scheu	Scheu Consulting Services, Inc.	O	DE
Chris Schmidt	Freeman Companies	A	DR
Ford Sellers	Chauvet Lighting	O	MP

Rigging Working Group members as of 15 October 2020

Delegate	Representing	Voting status	Int. cat.
Steven Serafin	The Hartford Group	P	G
Michael Shaw	Motion Laboratories, Inc.	A	MP
Harold Ike Shippers	Syracuse Scenery & Stage Lighting Co., Inc.	A	DR
Mike Skinner	Contract Services Administration Trust Fund	P	U
Monica Skjonberg	Skjonberg Controls, Inc.	O	CP
Knut Skjonberg	Skjonberg Controls, Inc.	O	CP
John C. Snook	Thermotex Industries Inc.	O	CP
Lynn M. Snook	Thermotex Industries Inc.	O	CP
Russell Solomon	Texas Scenic Company	A	DR
Todd Spencer	PSAV Presentation Services	O	U
Stewart Stephens	S2 Technologies	P	G
Peter V. Svitavsky	Wenger Corp.	P	CP
Ross Taylor	Taylor & Taylor Associates	O	G
Jason Tello	T6 Truss Designs. LLC	P	CP
Ken Tilson	Columbus McKinnon Corp.	P	MP
Will Todd	Area Four Industries	P	MP
Troy Trinkle	Troy Trinkle, LLC	P	CP
Stephen Vanciel	IATSE Local 631	O	U
Elmer Veith	Reliable Design Services	P	CP
Nathan Villines	Tyler Truss Systems	P	MP
Steve Walker	Steve A. Walker & Associates	P	G
Patrick Wallace	PSAV Presentation Services	O	U
Mike Webb	Motion Laboratories, Inc.	A	MP
Charlie Weiner	Eurotruss	O	MP

Rigging Working Group members as of 15 October 2020

Delegate	Representing	Voting status	Int. cat.
Michael Wells	Xtreme Structures and Fabrication	P	MP
Drew Wending	PSAV Presentation Services	O	DR
Marty Wesstrom	Mountain Productions Inc.	O	DR
Mike Weston	PSAV Presentation Services	O	DR
Jeff Wilkowski	Thern, Inc.	A	MP
Greg Williams	PSAV Presentation Services	O	G
R. Duane Wilson	Amer. Society of Theatre Consultants	P	DE
Max A. Wilson	Applied Electronics	P	MP
Allen Winzler	Entertainment and Rigging Engineering.	P	DE
Stephan Jon Wood	Tait Towers Manufacturing LLC	P	CP
Jeong Sik Yoo	Ghost LX	O	DE
Andrew Young	Andrew Young	O	U
Paul Zagajeski	Wenger Corp.	A	CP

CP = Custom-market Producer
 DE = DEsigner
 DR = Dealer or Rental company
 G = General interest

MP = Mass-market Producer
 U = User

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