

**Minutes**  
**Rigging Working Group**  
Tuesday, 13 April 2021  
via WebEx

**Chairpersons:**

Bill Sapsis; Sapsis Rigging, Inc. (presiding)  
Christine L. Kaiser; Syracuse Scenery & Stage Lighting Co., Inc.

**Recording secretaries:**

Karl Ruling and Richard Nix; ESTA

**Attendees:**

Brent Armstrong; Alpine Rigging & Structural Design; P; CP  
Troy Atkinson; Production Resource Group; A; DR  
Dana Bartholomew; Silver State Wire Rope and Rigging; P; DR  
Patrick Bash; In-House Production; P; DR  
Peter W. Batt; Mainstage Theatrical Supply, Inc; P; DR  
Drew Becker; InterAmerica Stage, Inc.; A; CP  
Gert Jan Brouwer; Frontline Rigging & Motion B.V.; P; CP  
Frederic Caron; Frederic Caron; O; U  
Lee Chuong; Walt Disney Company; A; DE  
Jay Cid; R&M Materials Handling / Stagemaker; P; MP  
Thomas Cowdery; Thomas Cowdery; I; U  
Dan Culhane; Wenger Corp.; A; CP  
Bruce Darden; InterAmerica Stage, Inc.; P; CP  
Robert Dean; ZFX, Inc.; A; CP  
Tyler DeLong; DeLong Rigging Solutions; P; U  
Jonathan Deull; JSD Projects LLC; P; U  
Brad Dittmer; Stage Labor of the Ozarks; O; U  
Don Earl; Earl Girls, Inc.; P; DR  
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  
Pat Grenfell; Hoist Sales & Service; P; DR  
Tim Hansen; Oasis Stage Werks; P; DR  
Jeremy Hodgson; Jeremy Hodgson; I; G  
Quinten James; Flying By Troy; O; U  
Joseph Jeremy; Show Distribution Group, Inc.; P; CP  
Matt Jordan; Production Resource Group; A; DR  
Christine L. Kaiser; Syracuse Scenery & Stage Lighting Co., Inc.; P; DR  
Ryan Kunkel; Tait Towers Manufacturing LLC; A; CP  
Kyle Kusmer; Steven Schaefer Associates, Inc; P; DE  
Ed Leahy; Chicago Flyhouse, Inc; P; CP  
Jon Lenard; Applied Electronics; A; MP  
Daniel H. Louis; Theta Consulting LLC; P; G  
Theresa Lovell; Xtreme Structures and Fabrication; A; MP  
Ryan McAlpine; Foy Invention Enterprises, Inc.; O; DR  
Sam Michael; Thern, Inc.; P; MP  
Orestes Mihaly; Production Resource Group; P; DR  
Rick Montgomery; Motion Laboratories, Inc.; P; MP  
Neil Montour; Atlanta Rigging Systems; P; DR  
Bartholomew J. Mueller; Recreation Engineering Inc.; P; DE  
Matt Panther; Reliable Design Services; A; CP  
Miriam Paschetto; Geiger Engineers; P; DE

Stefan Pries; NEP Live Events; P; DR  
Jeffrey M. Reder; Clark-Reder Engineering, Inc.; P; G  
Luke Ricca; Luke Ricca; O; G  
Ryan Riordan; Accurate Staging, Inc.; P; CP  
Ryan Roby; Ryan Roby; O; U  
Eric Rouse; Entertainment Project Services, LLC; P; CP  
Chris Schmidt; Freeman Companies; A; DR  
Steven Serafin; The Hartford Group; P; G  
Peter V. Svitavsky; Wenger Corp.; P; CP  
Jason Tello; T6 Truss Designs. LLC; P; CP  
Will Todd; Area Four Industries; P; MP  
Troy Trinkle; Troy Trinkle, LLC; P; CP  
Elmer Veith; Reliable Design Services; P; CP  
Steve Walker; Steve A. Walker & Associates; P; G  
Michael Wells; Xtreme Structures and Fabrication; P; MP  
Greg Williams; PSAV Presentation Services; O; G  
Max A. Wilson; Applied Electronics; P; MP  
Allen Winzler; Entertainment and Rigging Engineering; P; DE  
Stephan Jon Wood; Tait Towers Manufacturing LLC; P; CP

## **1 Opening Remarks**

Bill Sapsis called the meeting to order at 11:02, thanking everyone for their time and attendance. He asked that everyone pause for a few moments to reflect upon the passing of Rod Kaiser, as he spoke in remembrance. He extended condolences to Chris Kaiser, on behalf of the working group.

## **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.*

### **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.*

Nothing was revealed.

## **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.*

### **3.2 Introduction of attendees**

### **3.3 Determination of a quorum**

*(There are 70 voting entities. A quorum is 24, a supermajority is 36)*

Richard Nix confirmed that there was a quorum and supermajority present.

### **3.4 Processing of new membership and status change requests**

*The following applications or status change requests have been received:*

*Quinten James; Flying By Troy; O; U (new application)  
Tyler DeLong; DeLong Rigging Solutions; P; U (new application)  
Troy Atkinson; PRG; A; DR (new application)  
Matt Jordan; A; PRG; A; DR (new application)  
Ted Jones; P Grand Stage; DR (voting status change request)*

Orestes Mihaly moved to accept the applications and change requests. The motion was seconded, and carried without objection 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:*

*Miriam Paschetto; Geiger Engineers  
Pat Grenfell; Hoist Sales & Service*

Both were present.

#### **3.5.2 Letter ballot notices**

*The following voters have missed the last two letter ballots and will be moved to Observer status if the next letter ballot is missed.*

*Miriam Paschetto; Geiger Engineers  
Jeremy Hodgson; Jeremy Hodgson*

People were reminded that responding to letter ballots is a requirement for voting status.

#### **3.5.3 Automatic status changes occurring before this meeting**

*The following automatic status changes have occurred since the last meeting.*

*Shawn Nolan (no longer works for Rimkus)*

### **3.6 Consensus body**

As of today, after all changes resulting from working group action, the consensus body is:

<b>Delegate</b>	<b>Representing</b>	<b>Voting status</b>	<b>Int. category</b>
Ryan Riordan	Accurate Staging, Inc.	P	CP
Brent Armstrong	Alpine Rigging	P	DE
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
Neil Montour	Atlanta Rigging Systems	P	DR
Ed Leahy	Chicago Flyhouse, Inc	P	CP
Jeff Reder	Clark-Reder Engineering	P	G
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
Jordi van Burkum	Cybermotion North America	P	DR
Tyler DeLong	DeLong Rigging Solutions	P	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
Gert Jan Brouwer	Frontline Rigging	P	CP
Joe Golden	Gallagher Staging & Productions	P	DR
Miriam Paschetto	Geiger Engineers	P	DE
Ted Jones	Grand Stage	P	U
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
Rod Haney	I.A.T.S.E. Local 891	P	U
Ross Long	I.A.T.S.E. Local 891	A	U
Pat Bash	In-House Productions Labor	P	DR
Bruce Darden	InterAmerica Stage, Inc.	P	CP

<b>Delegate</b>	<b>Representing</b>	<b>Voting status</b>	<b>Int. category</b>
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
Troy Atkinson	Production Resource Group	A	DR
Matt Jordan	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
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
Brad Dittmer	Stage Labor of the Ozarks	P	U
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
Jason Tello	T6 Truss Designs. LLC	P	CP
Stephan Jon Wood	Tait Towers Manufacturing LLC	P	CP
David Bond	Tait Towers Manufacturing LLC	A	CP

<b>Delegate</b>	<b>Representing</b>	<b>Voting status</b>	<b>Int. category</b>
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
Thomas Cowdery	Thomas Cowdery	I	U
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
Andrew Young	Andrew Young	I	U
Kalen Larson	ZFX, Inc.	P	CP
Robert Dean	ZFX, Inc.	A	CP
	<b>Total votes possible</b>		<b>71</b>
<b>Votes by interest category</b>	Custom market producer (CP)		14
	Mass market producer (MP)		10
	Dealer or rental company (DR)		16
	User (U)		12
	General interest (G)		11
	Designer (DE)		8

#### **4 Approval of the minutes from the last meeting**

[See [RWGmin01-2021r1\\_DRAFT.pdf](#)]

Joe Golden moved to approve the minutes. The motion was seconded, and carried without objection or abstention.

#### **5 Approval of agenda**

Tim Hansen moved to approve the agenda. The motion was seconded, and carried without objection or abstention.

#### **6 Old Business**

**6.1 ANSI E1.1 – 2018, wire rope ladders** (Reaffirm, revise, or withdraw by 27 September 2023)

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

*So far, the WG letter ballot motion has carried, but the ballot was recirculated until 31 March due to editorial comments. Stay tuned.*

The extended letter ballot motion to accept as ANS carried without objection. It's queued for the TSC meeting Monday.

**6.3 BSR E1.4-1 - 202x, Entertainment Technology--Manual Counterweight Rigging Systems** (Open for revision) *Task group members:* Richard Nix (Leader), Bruce Darden, Dan Culhane, Eric Rouse; Jim Niesel; Pat Grenfell; Peter Batt; Peter Scheu; Reid Neslage; Sam Michael; Ted Jones  
[See [BSR\\_E1\\_4-1-202x\\_2014-2029r6a.pdf](#)]

*The task group has offered the revised draft to the working group for consideration of its first public review.*

Richard Nix moved to approve its first public review. The motion was seconded and carried without objection. The motion will forward to the TSC.

**6.4 BSR E1.4-2 - 202x, Entertainment Technology—Statically Suspended Rigging Systems** (Open for revision) *Task group members:* Bart Mueller (leader), Ethan Gilson, Ted Jones, Jesse Adams, Brad Dittmer, and Peter Batt

*So far, the WG letter ballot motion has carried, but the ballot was recirculated until 31 March due to editorial comments. Stay tuned. It's queued for the TSC meeting.*

The extended letter ballot motion to accept as ANS carried without objection. It's queued for the TSC meeting Monday.

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

**6.6 ANSI E1.6-1 - 2021, Entertainment Technology--Powered Hoist Systems** (Reaffirm, revise, or withdraw before 10 May 2024)

*The latest revision is published.*

**6.7 ANSI E1.6-2 - 2020, Entertainment Technology--Design, Inspection, and Maintenance of Electric Chain Hoists for the Entertainment Industry** (Reaffirm, revise, or withdraw before 14 August 2025)

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

**6.9 BSR E1.6-4 - 202x, Design, Manufacture, and Inspection of Portable Controls for Electric Chain Hoists in the Entertainment Industry** (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).

*From the January 2021 draft meeting minutes:*

*Joseph Jeremy reported no news. Had hoped to have a document for this meeting, but the task group is not ready yet. There should be a document for the next meeting.*

*Any news or action?*

Joe Jeremy reported progress with the drafts, and expects to have something for review at the next 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).

*From the January 2021 draft meeting minutes:*

*Joseph Jeremy reported no news. Had hoped to have a document for this meeting, but the task group is not ready yet. There should be a document for the next meeting.*

*Any news or action?*

Joe Jeremy reported progress with the drafts, and expects to have something for review at the next meeting.

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

**6.12 ANSI E1.15 - 2006 (R2021), Entertainment Technology--Recommended Practices and Guidelines for the Assembly and Use of Theatrical Boom & Base Assemblies** (Reaffirm, revise, or withdraw before 08 March 2026)

*The reaffirmation process has been completed. It's published.*

**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)

**6.14 ANSI E1.22 - 2016, Entertainment Technology - Fire Safety Curtain Systems** (Reaffirm, revise, or withdraw by 11 October 2021)

*From the January 2021 meeting minutes:*

*Bill Sapsis appointed Dan Culhane to form a task group to make a recommendation for reaffirmation, revision, or withdrawal. Tim Hansen, and Bruce Darden volunteered to assist, so they were also appointed to the task group.*

*Any news or action?*

Dan Culhane reported. He moved to open the document for revision. The motion was seconded, and carried without objection. Eric Rouse and Ted Jones were also appointed to the task group.

**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:* Ethan Gilson (task group leader), Bill Sapsis, Chris Schmidt, Will Todd, Dana Bartholomew, Rod Haney, Mike Wells, Alan Winzler

*The WG letter ballot motion to accept as ANS carried, and has been forwarded to the TSC.*

**6.16 BSR E1.43 - 202x, 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

*Any news or action?*

Eric Rouse reported they are meeting every two weeks, making good progress. He said to expect more clarity in the scope, and with respects to scale of the actual production in which the effect is being used. They are changing the roles and responsibilities, and are expanding the annex notes.

### **6.17 Rigging Glossary**

*Any news or action?*

**6.18 ANSI E1.47 – 2020, Recommended Guidelines for Entertainment Rigging System Inspections** (Reaffirm, revise or withdraw before 18 June 2025)

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

**6.20 ANSI E1.56 - 2018, Rigging Support Points Design, Fabrication, Installation, and Testing** (Reaffirm, revise or withdraw by 06 November 2023)

**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

*The WG letter ballot motion carried, and has been forwarded to the TSC.*

**6.22 BSR E1.70 – 202x, Selection and Use of Ground Supported Winch Stands and Towers in the Entertainment Industry** *Task group members:* Jacob Abbott, Ethan Gilson (task group leader), Eric Rouse, Will Todd, Elmer Veith, Ryan Riordan, and Max Wilson

*From the January 2021 draft meeting minutes:*

*Ethan Gilson said that the task group will be convened to work on this.*

*Any news or action?*

Ethan Gilson reported that the task group will meet tomorrow.

## **7 New business**

## **8 Other business and announcements**

### **8.1 Above & Beyond Awards**

### **9 Schedule for future meetings**

*The meeting schedule may be found at <http://www.esta.org/ESTA/meetings.php>. The next meeting is scheduled for 11:00 AM Monday 26 July 2021.*

**10 Adjournment**

The agenda being complete, and there being no further business brought forth, Bill Sapsis declared the meeting adjourned at 11:37

Rigging Working Group members as of 20 April 2021

Name	Representing	Status	Int Cat
Jacob Abbott	PSAV Presentation Services	O	U
Jesse Adams	Rose Brand Wipers, Inc	P	DR
Matthew Antonucci	Contract Services Administration Trust Fund	O	U
Brent Armstrong	Alpine Rigging & Structural Design	P	CP
Troy Atkinson	Production Resource Group	A	DR
William Ian Auld	Auld Entertainment	O	U
Robert Barbagallo	Solotech Inc.	O	DR
Dana Bartholomew	Silver State Wire Rope and Rigging	P	DR
Patrick Bash	In-House Production	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
Jordi Van Berkum	Cybermotion North America	P	DR
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
Bennett Brian	Reed Rigging Inc.	P	DR
Gert Jan Brouwer	Frontline Rigging & Motion B.V.	P	CP
Paul Brunner	Thern, Inc.	A	MP
David M. Campbell	Geiger Engineers	O	G
Frederic Caron	Frederic Caron	O	U
Joseph Champelli	Entertainment Project Services, LLC	A	CP
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
Thomas Cowdery	Thomas Cowdery	I	U
Brandon Cox	Heavyweight Solutions	O	CP
Dan Culhane	Wenger Corp.	A	CP

Rigging Working Group members as of 20 April 2021

Name	Representing	Status	Int Cat
Bruce Darden	InterAmerica Stage, Inc.	P	CP
David Darland	PSAV Presentation Services	O	U
Robert Dean	ZFX, Inc.	A	CP
Tyler DeLong	DeLong Rigging Solutions	P	U
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
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
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

Rigging Working Group members as of 20 April 2021

Name	Representing	Status	Int Cat
Donald Hoffend_III	Avista Designs, LLC	O	G
Cedric Jackson	Screen Actors Guild - American Federation of Television & Radio Artists	O	G
Quinten James	Flying By Troy	O	U
Joseph Jeremy	Show Distribution Group, Inc.	P	CP
Ted Jones	Grand Stage	O	U
Matt Jordan	Production Resource Group	A	DR
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
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	Wendy Manson	O	G
Ryan McAlpine	Foy Inveneterprises, Inc.	O	DR
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
Neil Montour	Atlanta Rigging Systems	P	DR
John P. Moore	Vertigo	A	CP
Chris Moulton	Contract Services Administration Trust Fund	A	U

Rigging Working Group members as of 20 April 2021

Name	Representing	Status	Int Cat
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
Richard J. Nix	Richard J. Nix	I	G
Shawn Nolan	Rimkus Consulting Group, Inc	P	G
Tracy Nunnally	Vertigo	P	CP
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
Jeffrey M. Reder	Clark-Reder Engineering, Inc.	P	G
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	Ryan Roby	O	U
Eric Rouse	Entertainment Project Services, LLC	P	CP
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
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

Rigging Working Group members as of 20 April 2021

Name	Representing	Status	Int Cat
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
Michael Wells	Xtreme Structures and Fabrication	P	MP
Drew Wending	PSAV Presentation Services	O	DR
Marty Weststrom	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	I	U
Paul Zagajeski	Wenger Corp.	A	CP

