

**Minutes**  
**Rigging Working Group**  
Thursday, 21 Mar 2019  
Hyatt Regency Louisville  
Louisville, KY

**Chairpersons:**

Chris Kaiser; Syracuse Scenery & Stage Lighting, Inc; P; DR  
Bill Sapsis; Sapsis Rigging; P; U; (presiding)

**Recording Secretaries:**

Karl Ruling and Richard Nix; (ESTA)

**Attendees:**

Jacob Abbott; PSAV Presentation Services; A; U  
Jesse Adams; Rose Brand Wipers, Inc; P; DR  
Tracie Allen; Tyler Truss Systems; A; CP  
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  
Justin Bennett; University of the Incarnate Word; O; U  
David Bond; Kinesys; O; MP  
Bennett Brian; Reed Rigging Inc.; P; DR  
Bruce Darden; InterAmerica Stage, Inc.; P; CP  
Jonathan Deull; JSD Projects LLC; O; U  
Jack Gallagher; R&M Materials Handling / Stagemaker; A; MP  
Mike Garl; Mike Garl Consulting LLC; P; DE  
Ethan W Gilson; Entertainment Rigging Services, LLC; P; U  
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; Cirque Du Soleil, Inc.; P; U  
Nick Holmberg; PSAV; O; DR  
Joseph Jeremy; Show Distribution Group, Inc.; P; CP  
Christine L. Kaiser; Syracuse Scenery & Stage Lighting Co., Inc.; P; DR  
Theresa Kelley; Xtreme Structures and Fabrication; A; MP  
Jerald Kraft; JTH Lighting Alliance; O; CP  
Tom Lapp; Cirque Du Soleil, Inc.; A; U  
Kalen Larson; ZFX, Inc.; P; CP  
Roger Lattin; I.A.T.S.E. Local 728; P; U  
Daniel H. Louis; Theta Consulting LLC; P; G  
Mike Merz; Steven Schaefer Associates, Inc; A; DE  
Sam Michael; Thern, Inc.; P; MP  
Orestes Mihaly; Production Resource Group; P; DR  
Rick Montgomery; Motion Laboratories, Inc.; P; MP  
Chris Moulton; Contract Services Administration Trust Fund; P; U  
Bartholomew J. Mueller; Recreation Engineering Inc.; P; DE  
Reid Neslage; H & H Specialties Inc.; P; MP  
Shawn Nolan; Production Resource Group; A; DR  
Tracy Nunnally; Vertigo; P; CP  
Carlos Ortega; PSAV Presentation Services; P; U  
Miriam Paschetto; Geiger Engineers; O; G  
Steven Ricks; Electronic Theatre Controls, Inc.; P; MP  
John Ringelman; Freeman Companies; P; DR  
Karl G. Ruling; ESTA; exf; G

Bill Sapsis; Sapsis Rigging, Inc.; P; U  
Chris Schmidt; Freeman Companies; A; DR  
Steven Serafin; Chubb Group of Insurance Companies; R; G  
Peter V. Svitavsky; Wenger Corp.; P; CP  
Ken Tilson; Columbus McKinnon Corp.; P; MP  
Will Todd; Area Four Industries; P; MP  
Elmer Veith; Reliable Design Services; P; CP  
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; P; MP  
Michael Wells; Xtreme Structures and Fabrication; P; MP  
Drew Wending; PSAV Presentation Services; O; DR  
Marty Wesstrom; Mountain Productions Inc.; P; DR  
Mike Weston; PSAV Presentation Services; O; DR  
R. Duane Wilson; Amer. Society of Theatre Consultants; P; DE  
Max A. Wilson; Applied Electronics; P; MP  
Allen Winzler; Clark-Reder Engineering, Inc.; P; DE  
Stephan Jon Wood; Tait Towers Manufacturing LLC; P; CP  
Andrew Young; Andrew Young; I; U  
Paul Zagajeski; Wenger Corp.; A; CP

#### **Visitors:**

Cedric Jackson; SAG-AFTRA;  
Michael C. Shaper; PSAV  
Eric Warden; PSAV  
Alfred Parish; I.A.T.S.E. Local 16  
Jennifer Estremera; I.A.T.S.E. Local 16  
Fred Caron; Cirque du Soliel  
Ed Leahy; Chicago Flyhouse  
Michael Pittman; I.A.T.S.E. Local 13  
Paul :“Luke” Lewkowicz; Paul E Lewkowicz PC (requested WG application for approval at July meeting)

#### **1 Opening Remarks**

Bill Sapsis called the meeting to order at 19:07, welcoming everyone to the meeting.

#### **2 Patent and anti-trust statements**

##### **2.1 Reading of the anti-trust statement**

Bill Sapsis read the following statement read 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 read 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.*

### **3 Attendance and Membership**

#### **3.1 Requirements for membership**

Bill Sapsis read the following statement read 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 currently 62 votes possible. A quorum is 21; a supermajority is 32.]*

Bill Sapsis asked for a show of hands of all voting members, and determined by count that a supermajority was present.

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

*As of 05 March 2019, the following applications or status change requests have been received:*

*Justin Bennett; University of the Incarnate Word; O; U (new application)  
Jacob Abbott; PSAV Presentation Services; A; U (status change request)  
Gregory Orth; WNP Services; P (Status change request from Observer)  
Drew Becker; InterAmerica Stage; A; DR (New application)  
Miriam Paschetto; Geiger Engineers; P; DE; (Status change request)  
Johnathan Deull; JSD Projects; P; (status change request)*

*Ethan Gillson moved to accept the applications and change requests as submitted by those present. The motion was seconded and carried. Greg Orth was not present so his status remained at that of Observer.*

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

##### **3.5.1 Attendance**

*The following voters have missed the last two meetings and are in jeopardy of being moved to Observer status if this meeting is also missed:*

*Reid Neslage; H & H Specialties, Inc.; P; MP  
Brad Dittmer; Stage Labor of the Ozarks; P; U*

*Reid Neslage was present, so no change; Brad Dittmer was not present, so his status is changed to Observer.*

##### **3.5.2 Letter ballots**

*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.*

*Ken Tilson; Columbus McKinnon Corp.; P; MP*  
*Nick Fleming; Columbus McKinnon Corp.; A; MP*  
*Chris Moulton; Contract Services Administration Trust Fund; P; U*  
*Carlos Ortega, PSAV Presentation Services; P; U*  
*Demian Purdy; PSAV Presentation Services; A; U*  
 Dave Sinkhorn; R&M Materials Handling / Stagemaker; P; MP  
 Jay Cid; R&M Materials Handling / Stagemaker; A; MP  
*Jack Gallagher; R&M Materials Handling / Stagemaker; A; MP*

Jack Gallagher said that Dave Sinkhorn is retiring. Karl Ruling said to tell ESTA staff when he has retired and no longer active. We will then remove him from the roster.

### 3.6 Consensus body

The full consensus voting body as of 21 March 2019, after all changes occurring at this meeting, is as follows. Check the list carefully.

Name	Representing	Status	Int Cat
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
Stewart Stephens	Ashford Management Group	P	DR
Steven Serafin	Chubb Group of Insurance Companies	P	G
Jeremy Hodgson	Cirque Du Soleil, Inc.	P	U
Tom Lapp	Cirque Du Soleil, Inc.	A	U
Allen Winzler	Clark-Reder Engineering	P	DE
Ken Tilson	Columbus McKinnon Corp.	P	MP
Nick Fleming	Columbus McKinnon Corp.	A	MP
Chris Moulton	Contract Services Administration Trust Fund	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
Joseph Champelli	Entertainment Project Services, LLC	P	DE
Steven Michelman	Entertainment Project Services, LLC	A	DE
Ethan W Gilson	Entertainment Rigging Services, LLC	P	U
Charlie Weiner	Eurotruss	P	MP
John Ringelman	Freeman Companies	P	DR
Chris Schmidt	Freeman Companies	A	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
Russ Dusek	I Weiss	P	MP

<b>Name</b>	<b>Representing</b>	<b>Status</b>	<b>Int Cat</b>
Edwin S. Kramer	I.A.T.S.E. Local 1	P	U
Roger Lattin	I.A.T.S.E. Local 728	P	U
Rod Haney	I.A.T.S.E. Local 891	P	U
Ross Long	I.A.T.S.E. Local 891	A	U
Bruce Darden	InterAmerica Stage, Inc.	P	CP
Drew Baker	InterAmerica Stage, Inc.	A	CP
Johnathan Deull	JSD Projects	P	U
William Beautyman	Limelight Productions, Inc.	P	DR
Peter Batt	Mainstage Theatrical Supply, Inc	P	DR
William B. Gorlin	M.G. McLaren, P.C.	P	G
Mike Garl	Mike Garl Consulting LLC	P	DE
Rick Montgomery	Motion Laboratories, Inc.	P	MP
Mike Webb	Motion Laboratories, Inc.	A	MP
Marty Wesstrom	Mountain Productions Inc.	P	DR
Jacob E. Loretto	Musson Theatrical Inc.	P	DR
Tim Hansen	Oasis Stage Werks	P	DR
Orestes Mihaly	Production Resource Group	P	DR
Shawn Nolan	Production Resource Group	A	DR
Keith Bohn	Production Rigging Resources	P	G
Carlos Ortega	PSAV Presentation Services	P	U
Demian Purdy	PSAV Presentation Services	A	U
Jacob Abbott	PSAV Presentation Services	A	U
Dave Sinkhorn	R&M Materials Handling / Stagemaker	P	MP
Jay Cid	R&M Materials Handling / Stagemaker	A	MP
Jack Gallagher	R&M Materials Handling / Stagemaker	A	MP
Bartholomew J. Mueller	Recreation Engineering Inc.	P	DE
Bennett Brian	Reed Rigging Inc.	P	DR
Elmer Veith	Reliable Design Services	P	CP
Richard J. Nix	Richard J. Nix	I	G
Jesse Adams	Rose Brand	P	DR
Bill Sapsis	Sapsis Rigging, Inc.	P	U
Kyle Kusmer	Steven Schaefer Associates, Inc.	P	DE
Mike Merz	Steven Schaefer Associates, Inc.	A	DE
Joseph Jeremy	Show Distribution Group, Inc.	P	CP
Bill McIntyre	Show Distribution Group, Inc.	A	CP
Dana Bartholomew	Silver State Wire Rope and Rigging	P	DR
Brad Dittmer	Stage Labor of the Ozarks	P	U

Name	Representing	Status	Int Cat
Steve Walker	Steve A. Walker & Associates	P	G
Christine L. Kaiser	Syracuse Scenery & Stage Lighting Co., Inc.	P	DR
Harold Ike Shippers	Syracuse Scenery & Stage Lighting Co., Inc.	A	DR
Stephan Jon Wood	Tait Towers Manufacturing LLC	P	CP
Tony Diemont	Texas Scenic Company	A	DR
Russell Solomon	Texas Scenic Company	P	DR
Jim Niesel	Theatre Projects Consultants, Inc.	P	DE
Jerry Gorrell	Theatre Safety Programs	P	G
Sam Michael	Them, Inc.	P	MP
Jeff Wilkowski	Them, Inc.	A	MP
Daniel H. Louis	Theta Consulting LLC	P	G
Jason Tello	Tyler Truss Systems	P	CP
Tracie Allen	Tyler Truss Systems	A	CP
Robert Haycock	UC Berkeley	I	U
Tracy Nunnally	Vertigo	P	CP
John P. Moore	Vertigo	A	CP
Ian Bevan	Walt Disney Parks & Resorts	P	U
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
Theresa Kelley	Xtreme Structures and Fabrication	A	MP
Mark Newlin	Xtreme Structures and Fabrication	A	MP
Andrew Young	Andrew Young	I	U
Kalen Larson	ZFX, Inc.	P	CP
<b>Total possible votes:</b>			<b>63</b>
<b>Votes by interest category:</b>	Custom market producer	CP	8
	Designer	DE	8
	Dealer or rental company	DR	15
	General interest	G	7
	Mass market producer	MP	11
	User	U	14
<b>Voting status key:</b> P = Principal voter, A = Alternate voter, I = Individual voter, O = Observer member			

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

[See *RWGminutes 01-2019r2\_ DRAFT.pdf*]

Orestes Mihaly moved to approve the minutes. The motion was seconded, and carried.

## 5 Approval of agenda

*The agenda must be approved, either as drafted or with modifications, by a vote of the working group.*

Pete Svitavsky moved to accept the agenda. The motion was seconded and carried

## 6 Old Business

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

### 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:* Keith Bohn (Chair), Jason Tello, Will Todd, Jacob Abbott, Jerry Gorrell, Elmer Veith, and Mike Garl

*From the January minutes:*

*Elmer Veith said that he would be in Texas and will meet with Keith Bohn to get some movement on this.*

Any news or updates?

Will Todd reported, it is moving along, with another Webex planned next week. Their goal is to provide a document to go out to public review by the July Meeting.

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

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

*Task group members:* Bart Mueller (Chair) Ethan Gilson, Ted Jones, Jesse Adams, and Brad Dittmer.

*[See BSRE 1.4-2DRAFT\_Rig2015-2023r4f.pdf and Change summary for BSRE 1.4-2DRAFT\_Rig2015-2023r4f.pdf]*

*At January's meeting the working group voted to approve the PR1 comment resolutions, but voted against sending the revised draft back out to public review, due to some concerns expressed about terminology used in the draft. Bill Sapsis directed people to offer comments to Bart by February 15.*

*The task group has returned a revised draft, along with a summary of changes made since the last meeting. Does the revision satisfy the concerns brought forth at the last meeting? Does the working group want to send it out for another public review?*

Bart moved to send to second public review, it was seconded and carried. A BSR8 will be filed with ANSI, and it will be sent to public review.

### 6.5 BSR E1.4-3 - 201x, Entertainment Technology - Manually Operated Hoist Rigging Systems

*Task group members:* Richard Nix and Sam Michael

*At January's meeting the working group voted to disapprove the proposed comment resolutions, which were returned to the task group for revision.*

Any news or updates?

Sam reported that their intention is to have a revision back before the July meeting

### 6.6 BSR E1.6-1 - 201x, Entertainment Technology--Powered Hoist Systems (last published in 2012--currently open for revision)

*Task group members:* Bruce Darden (chair), Chris Kaiser, Dan Culhane, Pete Svitavsky, Stephan Wood, Steve Ricks, Jim Niesel, Sandy Gilzow, Joe Champelli, and Steve Walker.

[See Smmry\_E1-6-1-201x\_RWGballot\_AcceptANS.pdf]

*The letter ballot to accept as an ANS timed out at midnight on 04 March 2019. The motion carried and the TSC has already voted to accept it as an ANS, so the motion will now be sent to the Executive Committee.*

*KARL Ruling asked if the previously approved resolutions and changes were substantive. Bruce Darden replied that he had reported at the last meeting that none of the changes were substantive. Bruce Darden made a motion affirming that this was indeed what had happened at the last meeting. The motion was seconded and approved unanimously. [TS Note: the January minutes reflected this motion.]*

**6.7 BSR E1.6-2 - 20xx, Entertainment Technology--Design, Inspection, and Maintenance of Electric Chain Hoists for the Entertainment Industry** (last published in 2018 – Open for revision)

*Task group members:* Ken Tilson, John Ringleman, Ben Brian, Marty Westrom, Rick Montgomery, Chris Schmidt, Mike Weston, Sandy Gilzow, and Elmer Veith (Chair)

*From the January minutes:*

*Elmer reported progress, and expects to have a document ready by July*

Any news, action, or updates to report?

Elmer reported that they had been working on public review comment resolutions, and are reviewing them with the commenters, they expect to have a document ready for public review by July.

Jack Gallagher requested to be appointed to the task group. Bill Sapsis made it so.

**6.8 BSR E1.6-3 - 201x, Selection and Use of Serially Manufactured Chain Hoists in the Entertainment Industry** (Last published 2012 – Open for revision)

*Task group members:* John Ringleman, Ben Brian, Pat Grenfell, Nick Fleming, Charlie Weiner, Rod Haney, Mike Weston, Greg Williams and Elmer Veith (Chair)

*It's in public review until 09 April 2019.*

*Karl Ruling reported that there are no comments so far.*

*[TS update: There were no comments received during the public review period. A formal comment summary will be distributed.]*

**6.9 BSR E1.6-4 - 201x, Control of Electric Chain Hoists in the Entertainment Industry** (Last published in 2013 – Open for revision)

*Task group members:* Rick Montgomery, John Ringleman, Elmer Veith, Jim Hodgson, Steve Wood, Mike Webb, Joe Jeremy (chair).

*From the January meeting minutes:*

*Joseph Jeremy reported that there is no news. The E1.64 task group will meet tomorrow. Progress is being made.*

*In a late-January email followup regarding BSR E1.6-4, Joe Jeremy wrote this:*

*So our E1.64TG group believes that the E1.6-4 document should live and cross reference E1.64.*

*So it is game on to fix it and have more discussion. Please add it to the next meeting agenda.*

Any news, action or updates to report?

Joe Jeremy gave a report. They had an informal meeting the day before and will be meeting in July. David Bond and Rod Haney requested to be appointed to this task group. Bill Sapsis made it so.



**6.10 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)

**6.11 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)

**6.12 BSR E1.21 - 20xx, Entertainment Technology — Temporary Structures Used for Technical Production of Outdoor Entertainment Events** (originally published 19 December 2013 – open for revision)  
*Task group members:* Richard Nix (Chair), Kyle Kusmer, Bill Gorlin, Dan Louis, Steve Serafin, Elmer Veith, Sandy Gilzow, and Rod Haney

*It's in public review until 09 April 2019.*

*[TS update: PR comments were received, and a comment summary will be distributed.]*

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

**6.14 ANSI E1.39 - 2015, Entertainment Technology –Selection and Use of Personal Fall Arrest Systems on Portable Structures Used in the Entertainment Industry** (Revision, reaffirmation, or withdrawal by 28 January 2020)

*From the January meeting minutes:*

*Bill Sapsis said that he intended to have this document opened for revision at the next meeting.*

It's the next meeting.

Orestes moved to open the document for revision. It was seconded and carried unanimously.

Bill Sapsis recalled all of most recent task group participants back, who were still active on the working group, and appointed a few new members, including himself. The appointed task group is now Chris Schmidt, Ethan Gilson, Will Todd, Dana Bartholomew, Shawn Nolan, Rod Haney, Mike Wells, and Bill Sapsis.

A PINS form will be filed with ANSI.

**6.15 ANSI E1.43 - 2016, Live performer flying effect standard** (Revise, reaffirm, or withdrawal by 12 February 2021)

#### **6.16 Rigging Glossary**

*[See RIGGING WORKING GROUP DOCUMENTS - DEFINITIONS 2-18-19.pdf]*

*An updated document containing definitions used in RWG documents as of 2-18-19 (all existing current standards and drafts in progress submitted to RWG as of 2-18-19) is included in the documents for this meeting. Yet to be accomplished in this document is modifying definitions to allow for easy alphabetic comparison (person, competent vs competent person).*

**6.17 BSR E1.47 – 20xx, Recommended Guidelines for Entertainment Rigging System Inspections** (Originally published on 28 April 2017 – open for revision)  
*Task group members:* Bart Mueller, Chris Kaiser (chair), Tracy Nunally, Ted Jones, Duane Wilson, Pete Svitavsky, Eric Rouse, Ian Bevan, Russell Solomon

*It's in public review until 09 April 2019.*

*There are no PR comments, as of today.*

*[TS update: PR comments were received and a comment summary will be distributed.]*

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

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

**6.20 BSR E1.59 – 20xx, Automation Vector Transmission Protocol**

*Task group members:* [RWG] Jem Hodgson, Joe Jeremy, Jim Love, Bill McIntyre, and Michael Lichter.  
[CPWG] Julian Hoare, Roger Lattin, Scott Blair, Dan Murfin, Kevin Loewen, and Rich Dionne

*It's in public review until 09 April 2019*

*[TS update: No comments were received. A formal comment summary will be distributed.]*

**6.21 BSR E1.67 – 201x, Design, Inspection, Maintenance, Selection, and Use of Hand-operated Chain-and Lever Hoists for the Entertainment Industry**

*The TSC approved the project at their January meeting. The project was assigned to the Rigging Working Group, and a PINS form has been filed with ANSI for this project. A task group has not yet been appointed.*

Bill Sapsis appointed Jack Gallagher, Mike Weston, Jake Abbott, Dana Bartholomew; and Charlie Weiner to the task group.

## **7 New business**

## **8 Other business and announcements**

Bill Sapsis spoke about Rocky Paulsen's Lifetime Achievement award, presented at the conclusion of the New World Rigging Symposium.

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

*Information on the Above & Beyond Awards may be found at [http://tsp.esta.org/tsp/news/award\\_recipients.html](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.*

## **9 Schedule for future meetings**

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

### **9.1 Summer 2019 meetings**

The July 2019 ESTA meetings will be held back in Westlake, TX, at the D/FW Marriott Solana, from 18 July through 22 July 2019. The Rigging Working Group is scheduled to meet from 14:00 – 18:00 on Friday 19 July 2019.

### **9.2 Fall 2019 meetings**

The October 2019 meetings will return to Westlake, TX., at the D/FW Marriott Solana, from 26-28 October 2019. The complete schedule is still to be confirmed.

## **10 Adjournment**

Dana Bartholomew moved to adjourn. The agenda being completed, and there being no further business brought forth, Bill Sapsis declared the meeting adjourned at 19:52

Rigging Working Group members as of 25 March 2019

Name	Company	Representing	Status	Int Cat
Jacob Abbott	PSAV Presentation Services	PSAV Presentation Services	A	U
Jesse Adams	Rose Brand	Rose Brand Wipers, Inc	P	DR
Tracie Allen	Tyler Truss Systems	Tyler Truss Systems	A	CP
Matthew Antonucci	Contract Services Administration Trust Fund	Contract Services Administration Trust Fund	O	U
Brent Armstrong	Alpine Rigging & Structural Design	Alpine Rigging & Structural Design	O	CP
William Ian Auld	Auld Entertainment	Auld Entertainment	O	U
Robert Barbagallo	Solotech Inc.	Solotech Inc.	O	DR
Dana Bartholomew	Silver State Wire Rope and Rigging	Silver State Wire Rope and Rigging	P	DR
Peter W. Batt	Mainstage Theatrical Supply, Inc	Mainstage Theatrical Supply, Inc	P	DR
William Beautyman	Limelight Productions, Inc.	Limelight Productions, Inc.	P	DR
Drew Becker	InterAmerica Stage, Inc.	InterAmerica Stage, Inc.	A	CP
Justin Bennett	University of the Incarnate Word	University of the Incarnate Word	O	U
Ian Bevan	Walt Disney Parks and Resorts	Walt Disney Parks & Resorts	P	U
Roy Bickel	Roy Bickel	Roy Bickel	O	G
Tyler Bland	Walt Disney Parks & Resorts	Walt Disney Parks & Resorts	O	U
Keith Bohn	Production Rigging Resources	Production Rigging Resources	P	G
David Bond	Kinesys USA Inc.	Kinesys	O	MP
William Bradburn	Aerial Arts, Inc.	Aerial Arts, Inc.	P	U
Louis Bradfield	Louis Bradfield	Louis Bradfield	O	U
Bennett Brian	Reed Rigging Inc.	Reed Rigging Inc.	P	DR
David M. Campbell	Geiger Engineers	Geiger Engineers	O	G
Joseph Champelli	Entertainment Project Services, LLC	Entertainment Project Services, LLC	P	DE
Jay Cid	R&M Materials Handling / Stagemaker	R&M Materials Handling / Stagemaker	A	MP

Rigging Working Group members as of 25 March 2019

<b>Name</b>	<b>Company</b>	<b>Representing</b>	<b>Status</b>	<b>Int Cat</b>
Daniel J. Clark	Clark-Reder Engineering, Inc.	Clark-Reder Engineering, Inc.	O	G
Benjamin Cohen	Chicago Flyhouse Inc.	Chicago Flyhouse Inc.	O	CP
David Collette	PSAV Presentation Services	PSAV Presentation Services	O	U
Dan Culhane	J.R. Clancy, Inc.	Wenger Corp.	A	CP
Bruce Darden	InterAmerica Stage, Inc.	InterAmerica Stage, Inc.	P	CP
David Darland	PSAV Presentation Services	PSAV Presentation Services	O	U
Robert Dean	ZFX, Inc.	ZFX, Inc.	O	CP
Jonathan Deull	JSD Projects LLC	JSD Projects LLC	O	U
Tony Diemont	Texas Scenic Company	Texas Scenic Company	A	DR
Jim Digby	Event Safety Alliance	Event Safety Alliance	O	U
Brad Dittmer	Stage Labor of the Ozarks	Stage Labor of the Ozarks	P	U
Russ Dusek	I Weiss	I Weiss	P	MP
Don Earl	Earl Girls, Inc.	Earl Girls, Inc.	P	DR
Nick Fleming	Columbus McKinnon Corp.	Columbus McKinnon Corp.	A	MP
Tim Franklin	Theta Consulting LLC	Theta Consulting LLC	O	G
Jack Gallagher	R&M Materials Handling / Stagemaker	R&M Materials Handling / Stagemaker	A	MP
Mike Garl	Mike Garl Consulting LLC	Mike Garl Consulting LLC	P	DE
James M. Garner	Walt Disney Studios - Disney Theatrical Group	Walt Disney Studios	O	G
Ethan W Gilson	Entertainment Rigging Services, LLC	Entertainment Rigging Services, LLC	P	U
Sanford P. Gilzow	Shur-Rig LLC	Shur-Rig LLC	O	G
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

Rigging Working Group members as of 25 March 2019

Name	Company	Representing	Status	Int Cat
Erin Grabe	ESTA	ESTA	exf	G
Pat Grenfell	Hoist Sales & Service	Hoist Sales & Service	P	DR
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	Pete Happe	Pete Happe	O	G
Sean Harding	Port Lighting Systems	Port Lighting Systems	O	G
Robert Haycock	Cal Performances	UC Berkeley	I	U
Chris Higgs	Total Solutions Group	Total Solutions Group	O	G
Jeremy Hodgson	Cirque Du Soleil, Inc.	Cirque Du Soleil, Inc.	P	U
Nick Holmberg	PSAV	PSAV	O	DR
Donald Hoffend_III	Avista Designs, LLC	Avista Designs, LLC	O	G
Joseph Jeremy	Niscon Inc.	Show Distribution Group, Inc.	P	CP
Ted Jones	Art Drapery Studios	Grand Stage	P	U
Kent H. Jorgensen	IATSE Local 80	IATSE Local 80	O	G
Gary Justesen	Oasis Stage Werks	Oasis Stage Werks	O	DR
Christine L. Kaiser	Syracuse Scenery & Stage Lighting Co., Inc.	Syracuse Scenery & Stage Lighting Co., Inc.	P	DR
Theresa Kelley	Xtreme Structures and Fabrication	Xtreme Structures and Fabrication	A	MP
Jerald Kraft	JTH Lighting Alliance	JTH Lighting Alliance	O	CP
Edwin S. Kramer	I.A.T.S.E. Local 1	I.A.T.S.E. Local 1	P	U
Kyle Kusmer	Schaefer	Steven Schaefer Associates, Inc	P	DE
Tom Lapp	Cirque Du Soleil, Inc.	Cirque Du Soleil, Inc.	A	U
Kalen Larson	ZFX, Inc.	ZFX, Inc.	P	CP
Roger Lattin	I.A.T.S.E. Local 728	I.A.T.S.E. Local 728	P	U

Rigging Working Group members as of 25 March 2019

<b>Name</b>	<b>Company</b>	<b>Representing</b>	<b>Status</b>	<b>Int Cat</b>
Jon Lenard	Applied Electronics	Applied Electronics	A	MP
Phillip Lewis	Tait Towers	Tait Towers Manufacturing LLC	O	MP
Michael Lichter	Electronic Theatre Controls, Inc. (DE)	Electronic Theatre Controls, Inc.	A	MP
Ross Long	I.A.T.S.E. Local 891	I.A.T.S.E. Local 891	A	U
Jacob E. Loretto	Musson Theatrical Inc.	Musson Theatrical Inc.	P	DR
Daniel H. Louis	Theta Consulting LLC	Theta Consulting LLC	P	G
Wendy Manson	Cirque Du Soleil, Inc.	Cirque Du Soleil, Inc.	O	U
Joseph McGeough	Flying by Foy	Foy Invenerprises, Inc.	O	CP
Bill McIntyre	Niscon Inc.	Show Distribution Group, Inc.	A	CP
Mike Merz	Schaefer	Steven Schaefer Associates, Inc	A	DE
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
Rick Montgomery	Motion Laboratories, Inc.	Motion Laboratories, Inc.	P	MP
John P. Moore	Vertigo	Vertigo	A	CP
Chris Moulton	Contract Services Administration Trust Fund	Contract Services Administration Trust Fund	P	U
Bartholomew J. Mueller	Recreation Engineering Inc.	Recreation Engineering Inc.	P	DE
John Neal	Rhino Staging	Rhino Staging	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
Jim Niesel	Theatre Projects Consultants, Inc.	Theatre Projects Consultants, Inc.	P	DE
Richard J. Nix	Richard J. Nix	Richard J. Nix	I	G
Shawn Nolan	Production Resource Group	Production Resource Group	A	DR

Rigging Working Group members as of 25 March 2019

Name	Company	Representing	Status	Int Cat
Tracy Nunnally	Vertigo	Vertigo	P	CP
Carlos Ortega	PSAV Presentation Services	PSAV Presentation Services	P	U
Gregory Orth	WNP Services, Inc.	WNP Services, Inc.	O	DR
Miriam Paschetto	Geiger Engineers	Geiger Engineers	O	G
Kurt Pragman	Pragman Associates, LLC	Pragman Associates, LLC	O	G
Demian Purdy	PSAV Presentation Services	PSAV Presentation Services	A	U
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
Eric Rouse	Chicago Flyhouse	Chicago Flyhouse	O	CP
Karl G. Ruling	ESTA	ESTA	exf	G
Tim Salamon	PSAV Presentation Services	PSAV Presentation Services	O	DR
Bill Sapsis	Sapsis Rigging, Inc.	Sapsis Rigging, Inc.	P	U
Peter A. Scheu	Scheu Consulting Services, Inc.	Scheu Consulting Services, Inc.	O	DE
Chris Schmidt	Stage Rigging, Inc.	Freeman Companies	A	DR
Ford Sellers	Chauvet Lighting	Chauvet Lighting	O	MP
Steven C. Shaw	Levitating Productions, Inc.	Levitating Productions, Inc.	O	MP
Harold Ike Shippers	Syracuse Scenery & Stage Lighting Co., Inc.	Syracuse Scenery & Stage Lighting Co., Inc.	A	DR
Dave Sinkhorn	R&M Materials Handling / Stagemaker	R&M Materials Handling / Stagemaker	P	MP
Monica Skjonberg	Skjonberg Controls, Inc.	Skjonberg Controls, Inc.	O	CP
Knut Skjonberg	Skjonberg Controls, Inc.	Skjonberg Controls, Inc.	O	CP
John C. Snook	Thermotex Industries Inc.	Thermotex Industries Inc.	O	CP
Russell Solomon	Texas Scenic Company	Texas Scenic Company	P	DR

Rigging Working Group members as of 25 March 2019

<b>Name</b>	<b>Company</b>	<b>Representing</b>	<b>Status</b>	<b>Int Cat</b>
Todd Spencer	PSAV Presentation Services	PSAV Presentation Services	O	U
Stewart Stephens	JSAV	Ashford Management Group	P	DR
Peter V. Svitavsky	J.R. Clancy, Inc.	Wenger Corp.	P	CP
Ross Taylor	Taylor & Taylor Associates	Taylor & Taylor Associates	O	G
Jason Tello	Tyler Truss Systems	Tyler Truss Systems	P	CP
Ken Tilson	Columbus McKinnon Corp.	Columbus McKinnon Corp.	P	MP
Will Todd	Tomcat USA, Inc.	Area Four Industries	P	MP
James Tomlinson	Team Tomlinson	Team Tomlinson	O	G
Stephen Vanciel	IATSE Local 631	IATSE Local 631	O	U
Elmer Veith	Reliable Design Services	Reliable Design Services	P	CP
Steve Walker	Steve A. Walker & Associates	Steve A. Walker & Associates	P	G
Patrick Wallace	PSAV Presentation Services	PSAV Presentation Services	O	U
Mike Webb	Motion Laboratories, Inc.	Motion Laboratories, Inc.	A	MP
Charlie Weiner	Total Structures, Inc.	Eurotruss	P	MP
Michael Wells	Xtreme Structures and Fabrication	Xtreme Structures and Fabrication	P	MP
Drew Wending	PSAV Presentation Services	PSAV Presentation Services	O	DR
Marty Wesstrom	Mountain Productions Inc.	Mountain Productions Inc.	P	DR
Mike Weston	PSAV Presentation Services	PSAV Presentation Services	O	DR
Jeff Wilkowski	Thern, Inc.	Thern, Inc.	A	MP
Greg Williams	PSAV Presentation Services	PSAV Presentation Services	O	G
R. Duane Wilson	George C. Izenour Associates	Amer. Society of Theatre Consultants	P	DE
Max A. Wilson	Applied Electronics	Applied Electronics	P	MP
Allen Winzler	Clark-Reder Engineering, Inc.	Clark-Reder Engineering, Inc.	P	DE



Rigging Working Group members as of 25 March 2019

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<b>Name</b>	<b>Company</b>	<b>Representing</b>	<b>Status</b>	<b>Int Cat</b>
Stephan Jon Wood	Stage Technologies	Tait Towers Manufacturing LLC	P	CP
Jeong Sik Yoo	Ghost LX	Ghost LX	O	DE
Andrew Young	San Diego State University	Andrew Young	I	U
Paul Zagajeski	J.R. Clancy, Inc.	Wenger Corp.	A	CP