

Minutes
Rigging Working Group
Friday, January 17, 2020
Wyndham Garden Anaheim
Anaheim, CA

Chairpersons:

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

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; T6 Truss Designs. LLC; A; CP
Peter W. Batt; Mainstage Theatrical Supply, Inc; P; DR
Drew Becker; InterAmerica Stage, Inc.; A; CP
Ian Bevan; Walt Disney Company; P; DE
Keith Bohn; Area Four Industries; A; MP
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
David Darland; PSAV Presentation Services; O; U
Jonathan Deull; JSD Projects LLC; P; U
Jennifer Ferguson; Kito Group; O; MP
Mike Garl; Mike Garl Consulting LLC; P; DE
Ethan W Gilson; Entertainment Rigging Services, LLC; P; U
Sanford P. Gilzow; Shur-Rig LLC; P; G
William B. Gorlin; M.G. McLaren, P.C.; P; G
Jerry Gorrell; Theatre Safety Programs; P; G
Pat Grenfell; Hoist Sales & Service; P; DR
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
Theresa Kelley; Xtreme Structures and Fabrication; A; MP
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
Ross Long; I.A.T.S.E. Local 891; A; U
Daniel H. Louis; Theta Consulting LLC; P; G
Mike Merz; Steven Schaefer Associates, Inc; A; DE
Rick Montgomery; Motion Laboratories, Inc.; P; MP
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

Matt Panther; Reliable Design Services; A; CP
Steven Ricks; Electronic Theatre Controls, Inc.; P; MP
John Ringelman; Freeman Companies; P; DR
Ryan Riordan; Accurate Staging, Inc.; P; CP
Ryan Roby; PRG; A; DR
Eric Rouse; Entertainment Project Services, LLC; P; CP
Tim Salamon; PSAV Presentation Services; O; DR
Chris Schmidt; Freeman Companies; A; DR
Steven Serafin; The Hartford Group; P; G
Stewart Stephens; Ashford Management Group; P; DR
Peter V. Svitavsky; Wenger Corp.; P; CP
Jason Tello; T6 Truss Designs. LLC; 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
Michael Wells; Xtreme Structures and Fabrication; P; MP
Drew Wending; PSAV Presentation Services; O; DR
Mike Weston; PSAV Presentation Services; O; DR
Greg Williams; PSAV Presentation Services; O; G
R. Duane Wilson; Amer. Society of Theatre Consultants; P; DE
Max A. Wilson; Applied Electronics; P; MP
Stephan Jon Wood; Tait Towers Manufacturing LLC; P; CP

Visitors:

Jennifer Estremera; IATSE Local 16
Mark Haggerty; Encore (PSAV)
Chris Mears

1 Opening Remarks

Bill Sapsis called the meeting to order at 19:02. Welcomed all to Anaheim. He thanked the attendees for their participation in the TSP.

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.

Richard Nix panned the camera over to Karl Ruling, who held up one of the easy-to-read pamphlets for everyone to see.

No restraint of trade problems were brought to the attention of the assembly.

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 and circulation of sign-in sheet

Everyone in the room introduced themselves, then the online attendees were introduced.

Karl Ruling held up a "Screaming Orange" sign-in sheet, reminding everyone in the room to be sure to sign it and indicate their presence.

3.3 Determination of a quorum

[There are 58 possible votes. A quorum is 20, a supermajority is 30.]

A count showed over 40 voters present, more than that required for a supermajority.

3.4 Processing of new membership and status change requests

As of 03 January 2020, the following applications or status change requests have been received:

*Brandon Cox; Heavyweight Solutions; O; CP (new application)
Jennifer Ferguson; Harrington Hoists, Inc; O; MP (new application)
Ed Leahy; Chicago Flyhouse, Inc; P; CP (new application)
Paul Brunner; Thern, Inc; A; MP (new application)
Jason Tello; T6 Truss Designs, LLC; P; CP (change of status)
Tracie Allen; T6 Truss Designs, LLC; A; CP (change of status)
Keith Bohn; Area 4 Industries; A; MP (change of status)
Matt Panther; Reliable Design Services; A; MP (new application)*

Dan Culhane moved to accept the applications as submitted. The motion was seconded and carried without objection.

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

3.5.1 Attendance

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

Steven Ricks; *Electronic Theatre Controls, Inc*; P; MP
 Michael Lichter; *Electronic Theatre Controls, Inc*; A; MP
 Jonathan Deull; *JSD Projects LLC*; P; U
 Andrew Young; *Andrew Young*; I; U
 Charlie Weiner; *Eurotruss*; P; MP

Neither Andrew Young nor Charlie Weiner were present, so their status has been changed to that of 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.

There are none.

3.5.3 Automatic status changes occurring before this meeting

The following automatic status changes have occurred since the last meeting:

Jack Gallagher, removed from working group (no longer with R&M Material Handling/Stagemaker)

3.6 Consensus body

The table below shows the full consensus voting body as of today's meeting date, after all changes occurring as a result of this meeting's action have been applied. Please check it carefully.

Name	Representing	Status	Int Cat
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
Stewart Stephens	Ashford Management Group	P	DR
Ed Leahy	Chicago Flyhouse, Inc	P	CP
Jeremy Hodgson	Cirque Du Soleil, Inc.	P	U
Tom Lapp	Cirque Du Soleil, Inc.	A	U
Frederic Caron	Cirque Du Soleil, Inc	A	U
Allen Winzler	Clark-Reder Engineering, Inc.	P	DE
Ken Tilson	Columbus McKinnon Corp.	P	MP
David Carmack	Columbus McKinnon Corp.	A	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
Eric Rouse	Entertainment Project Services, LLC	P	CP
Joseph Champelli	Entertainment Project Services, LLC	A	CP
Joshua "Fritz" Friendensohn	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
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
Rod Haney	I.A.T.S.E. Local 891	P	U
Ross Long	I.A.T.S.E. Local 891	A	U

Name	Representing	Status	Int Cat
Bruce Darden	InterAmerica Stage, Inc.	P	CP
Drew Becker	InterAmerica Stage, Inc.	A	CP
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
Marty Wesstrom	Mountain Productions Inc.	P	DR
Tim Hansen	Oasis Stage Werks	P	DR
Ryan Roby	Production Resource Group	A	DR
Orestes Mihaly	Production Resource Group	P	DR
Shawn Nolan	Production Resource Group	A	DR
Keith Bohn	Prolyte USA	P	MP
Carlos Ortega	PSAV Presentation Services	P	U
Demian Purdy	PSAV Presentation Services	A	U
Jacob Abbott	PSAV Presentation Services	A	U
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
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
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
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
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

Name	Representing	Status	Int Cat
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 Kelley	Xtreme Structures and Fabrication	A	MP
Kalen Larson	ZFX, Inc.	P	CP
Total possible votes:			57

Votes by interest category:

Custom market producer (CP):	11
Designer (DE):	8
Dealer or rental company (DR):	13
General interest (G):	7
Mass market producer (MP):	9
User (U):	9

Status key: P = Principal voter, A = Alternate voter, I = Individual voter

4 Approval of the minutes from the last meeting

[See RWGmin10-2019_DRAFT.pdf]

Dan Culhane moved to accept the minutes as submitted. The motion was seconded and carried without objection.

5 Approval of agenda

Dan Culhane moved to accept the agenda as drafted. The motion was seconded and carried without objection.

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 (chair), Jacob Abbott, Keith Bohn, Jerry Gorrell, Jason Tello, Will Todd, Richard Nix, and Elmer Veith.

[See BSR_E1-2_PR1 CmmntResolsDRAFT.pdf and BSR E1-2_201x_Rig2019-2022r1.pdf]

The document's first public review ended on 24 December 2019. The comment summary with proposed resolutions, and a revised draft has been distributed to the working group. Any updates or action?

Mike Garl moved to approve the draft comment resolutions. The motion was seconded, and carried with the required supermajority vote, and without objections or abstentions.

Mike Garl moved that document be accepted as an ANS. The motion was seconded, and will be decided by letter ballot vote (Rig/2020-2003).

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

No news or action.

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, Peter Batt
[See BSRE 1.4-2DRAFT_Rig2015-2023r5a.pdf]

From October's draft meeting minutes:

Bart Mueller reported that they had discovered a discrepancy between this document and the inspections document, regarding frequency of inspections. Chris Kaiser elaborated on the nature of the discrepancy, pointing out that the statically suspended standard requires a 1-year frequency, or shorter interval as required by a qualified person, while the inspections document currently requires a 5-year interval. She also

acknowledged that there were systems that do not require annual inspections. There was considerable discussion.

Bart moved to accept the draft comment resolutions. The motion was seconded, and carried without objection and with two abstentions.

The inspection frequency requirements in the draft will be revised, based on today's discussions.

The revised draft has been distributed to the working group for consideration at this meeting.

Bart Mueller reported that the revised draft has been delivered, so he then moved to send it out to another public review. The motion was seconded and carried without objection. A BSR8 will be filed with ANSI, and the public review will commence accordingly.

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

Task group members: Richard Nix and Sam Michael

[see BSR_E1-4-3-20xx_PR4 CmmntSmmry.pdf]

The document's fourth public review ended on 30 December 2019. No comments were received and a comment summary has been sent to the RWG.

Any updates or action?

Richard Nix moved that it be accepted as an ANS. The motion was seconded, and will be decided by letter ballot vote (Rig/2020-2004).

6.6 ANSI E1.6-1 - 2019, Entertainment Technology--Powered Hoist Systems (Reaffirm, revise or withdraw before 27 January 2024)

[See BillGorlin_ANSI E1.6-1 - 2019 Likely Error _ Fastmail.pdf and OlafSoot_letter.pdf]

Bill Gorlin sent an email regarding a possible error in E1.6-1 design factor requirements. Olaf Sööt sent a letter suggesting that E1.6-1 be revised to include failsafe design requirements. Both documents have been distributed to the working group for discussion.

Bill Gorlin moved that we revise only section 6.6.1. The motion was seconded by discussion. The motion carried, with three abstentions in the room. A PINS will be filed with ANSI.

Bill Sapsis appointed *Bill Gorlin, Steve Walker, Eric Rouse, Pete Svitavsky, Shawn Nolan, and Chris Kaiser* to the task group.

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, Jack Gallagher, and Elmer Veith (Chair)

[see BSR_E1-6-2_PR1 CmmntSmmry.pdf]

The document's first public review ended on 24 December 2019. The comment summary has been sent to the RWG.

Elmer Veith said that they had a few comments, the task group has been discussing how to address them. They don't think the changes would be substantive, but resolutions should be offered to the RWG at the April meeting.

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 or action.

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: David Bond, Rod Haney, Rick Montgomery, John Ringleman, Elmer Veith, Jem Hodgson, Stephen Wood, Mike Webb, Joe Jeremy (chair).

Any news or updates?

Joe Jeremy reported they had a task group meeting today, and are making progress.

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)

No news or action.

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)

No news or action.

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

[see [BSR_E1-21-20xx_PR3 CmmntSmmry.pdf](#)]

The second public review ended on 31 December 2019. No comments were received, and a comment summary has been sent to the RWG.

Richard Nix moved that it be accepted as an ANS. The motion was seconded, and the motion will be answered by a letter ballot vote (Rig/2020-2005)

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

Jerry Gorrell said that there would be a new version of NFPA 80 soon, and that E1.22 is still referenced there.

6.14 BSR E1.39 - 201x, 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 (TG Chair), Will Todd, Dana Bartholomew, Shawn Nolan, Rod Haney, Mike Wells, and Bill Sapsis.

Ethan Gilson said that they have a revised document, but the task group wants to look at it again. It should be ready to be considered for public review at the April meeting.

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

No news or action.

6.16 Rigging Glossary

Chris Kaiser reported no news.

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

[see [BSR_E1-47-20xx_PR2 CmmntResols_DRAFT.pdf](#) and [1-3-20_BSR_E1-47-20xx_Rig_2014-2003r71.pdf](#)]

The document's second public review ended on 31 December 2019. A comment summary with proposed resolutions, and a revised draft, has been sent to the RWG for consideration.

Pete Svitavsky moved that the draft resolutions be accepted. The motion was seconded, and carried with no objection and one abstention.

Pete Svitavsky then moved to approve the document as an ANS. The motion was seconded, and will be answered by letter ballot vote (Rig/2020-2006).

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

Task Group: Mike Weston, Jake Abbott (TG Chair), Dana Bartholomew; and Charlie Weiner
[See BSR_E1-67-202x_R0.pdf]

The task group has submitted a draft document for consideration of a first public review.

Jacob Abbott moved for public review. The motion was seconded. Bill Gorlin asked about the defined terms and questioned some of the language. Sapsis reminded the group that the motion is to offer the document for public review. Gorlin agreed to offer comments in public review.

The motion was approved with all yes votes except for two abstentions. The motion will forward to the TSC for consideration.

7 New business

7.1 Automated “practicals”

From October's draft meeting minutes:

Jesse Adams wasn't present. Bill Sapsis suggested that this could be removed from the agenda. Richard Nix reminded everyone that this project comes from the Stage Machinery Working Group. Dan Culhane concurred, then said that the SMWG had agreed to reach out to Jesse to see if the task could be moved forward.

Jesse Adams said that the SMWG task group is withdrawing input from RWG at this time. They have been working on a revised scope.

7.2 Possible new project: Ground-supported winch stands and towers

[See TSP_ProjectRequest - Winch Towers for RWG.pdf]

Jacob Abbott moved that we accept the project. The motion was seconded. The motion carried with one abstention and all the rest in favor. The project request will be considered by the TSC during the following Sunday's meeting. If approved by the TSC, a PINS will be filed with ANSI.

8 Other business and announcements

8.1 NFPA 80 public comment updates

The NFPA 80 Committee met on 13-14 November 2019, to discuss the proposed changes. Any news or updates?

Jerry Gorrell said that the one public proposal that would change the fire safety curtains material requirements was voted down. It could come back in the public review of the report on the comment resolutions.

Dan Culhane also reported that the proposed changes received were resolved by explaining that the fabrics and assemblies are more like building materials than fabric draperies. This was sufficient for the committee to disapprove the proposed changes.

8.2 Above & Beyond Awards

Information on the Above & Beyond Awards 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.

Bruce Darden mentioned that the SMWG had presented Joe Jeremy with an award the prior evening, much of his efforts were related to, or originated from, his work on the RWG.

9 Schedule for future meetings

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

9.1 Spring 2020 meetings (USITT, Houston, TX)

The Spring 2020 meetings will be held in conjunction with the USITT conference in Houston, TX, from 01-04 April 2020. The Rigging Working Group is scheduled for 19:00 – 23:00 on Thursday 02 April 2020, at the Marriott Marquis, in Houston, TX.

9.2 Summer 2020 meetings (NATEAC, NYC)

The Summer 2020 meetings will be held in conjunction with the NATEAC event in New York City, 19-20 July 2020. The complete schedule has not yet been confirmed.

10 Adjournment

Pete Svitavsky moved that the meeting adjourn. The motion was seconded. Hearing no objections, Bill Sapsis declared the meeting adjourned at 20:00.

Rigging Working Group members as of 03 February 2020

Delegate	Representing	Voting status	Int. cat.
Jacob Abbott	PSAV Presentation Services	A	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	Them, Inc.	A	MP
David M. Campbell	Geiger Engineers	O	G
David Carmack	Columbus McKinnon Corp.	A	MP
Frederic Caron	Cirque Du Soleil, Inc	A	U
Joseph Champelli	Entertainment Project Services, LLC	A	CP

Rigging Working Group members as of 03 February 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
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
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
Ethan W Gilson	Entertainment Rigging Services, LLC	P	U
Sanford P. Gilzow	Shur-Rig LLC	P	G
William B. Gorlin	M.G. McLaren, P.C.	P	G

Rigging Working Group members as of 03 February 2020

Delegate	Representing	Voting status	Int. cat.
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
Pete Happe	Pete Happe	O	G
Sean Harding	Port Lighting Systems	O	G
Robert Haycock	UC Berkeley	I	U
Chris Higgs	Total Solutions Group	O	G
Jeremy Hodgson	Cirque Du Soleil, Inc.	P	U
Nick Holmberg	PSAV	O	DR
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
Theresa Kelley	Xtreme Structures and Fabrication	A	MP
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
Tom Lapp	Cirque Du Soleil, Inc.	A	U

Rigging Working Group members as of 03 February 2020

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
Wendy Manson	Cirque Du Soleil, Inc.	O	U
Bill McIntyre	Show Distribution Group, Inc.	A	CP
Mike Merz	Steven Schaefer Associates, Inc	A	DE
Sam Michael	Them, 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
Richard J. Nix	Richard J. Nix	I	G

Rigging Working Group members as of 03 February 2020

Delegate	Representing	Voting status	Int. cat.
Richard J. Nix	ESTA	exf	G
Shawn Nolan	Production Resource Group	A	DR
Tracy Nunnally	Vertigo	P	CP
Carlos Ortega	PSAV Presentation Services	P	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
Demian Purdy	PSAV Presentation Services	A	U
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	PRG	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
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

Rigging Working Group members as of 03 February 2020

Delegate	Representing	Voting status	Int. cat.
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	Ashford Management Group	P	DR
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
Stephen Vanciel	IATSE Local 631	O	U
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	O	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
Jeff Wilkowski	Thern, Inc.	A	MP

Rigging Working Group members as of 03 February 2020

Delegate	Representing	Voting status	Int. cat.
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	Clark-Reder Engineering, Inc.	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