

Minutes
Rigging Working Group
Saturday, 07 October 2023
Marriott D/FW Westlake

Chairpersons:

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

Recording secretary:

Richard Nix (ESTA)

Attendees:

Troy Atkinson; Production Resource Group; A; DR
William Ian Auld; Auld Entertainment; O; U
Peter W. Batt; Mainstage Theatrical Supply, Inc; P; DR
Drew Becker; InterAmerica Stage, Inc.; A; CP
Jordi Van Berkum; Cybermotion North America; O; DR
Ian Bevan; Walt Disney Company; P; DE
David Boevers; Carnegie Mellon University; P; DE
Gert Jan Brouwer; Frontline Rigging & Motion B.V.; P; CP
David Carmack; Dave Carmack Consulting, Inc.; P; G
John Caudill; Productions Unlimited; P; DE
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.; P; CP
Tyler DeLong; DeLong Rigging Solutions; P; U
Jonathan Deull; JSD Projects LLC; P; U
Don Earl; Earl Girls, Inc.; P; DR
Scott England; Cirque du Soliel Entertainment Group; P; U
Jennifer Ferguson; Kito Group; P; MP
Tim Franklin; Theta Consulting LLC; P; G
Michael Freeman; Texas Scenic Company; P; 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
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
Benjamin Hague; Benjamin Hague; I; G
Tim Hansen; Oasis Stage Werks; P; DR
Jeremy Hodgson; Jeremy Hodgson; I; G
Joseph Jeremy; Show Distribution Group, Inc.; P; CP
Paige Kassab; Liberty Mutual Insurance; O; DE
Chong Kim; CMK Engineering, PLLC; O; DE
Ryan Kunkel; Tait Towers Manufacturing LLC; A; CP
Ed Leahy; Chicago Flyhouse, Inc; P; CP
Paul "Luke" Lewkowicz; Paul E Lewkowicz PC; O; DE
Rick Montgomery; Motion Laboratories, Inc.; P; MP
Neil Montour; Atlanta Rigging Systems; P; DR
Bartholomew J. Mueller; Recreation Engineering Inc.; P; DE
Reid Neslage; Reid Neslage; I; G
Ryan Niemi; Sunset Dynamics; P; CP
Shelby Obitts; Liberty Mutual Insurance; O; DE
Patricio (Pat) Perez; SAG AFTRA; P; G
Camille Petrillo; Sapsis Rigging, Inc.; O; U
Stefan Pries; NEP Live Events; P; DR
Jeffrey M. Reder; Clark-Reder Engineering, Inc.; P; G

John Ringelman; Freeman Companies; P; DR
Shane Rogers; Warner Bros. Discovery; P; U
John Rourke; Stagecraft Industries, Inc.; P; DR
Eric Rouse; Entertainment Project Services, LLC; P; CP
Chris Ruble; Christopher Ruble; I; U
Bryan Schafer; Warner Bros. Discovery; A; U
Jonathan Shimon; University at Buffalo - SUNY; P; U
Eric Silzer; Reed Rigging, Inc.; A; DR
Mike Skinner; Contract Services Administration Trust Fund; P; U
Stewart Stephens; S2 Technologies; P; G
Patrick Stewart; Patrick Stewart; O; U
Michael Viau; Pinnacle Live; O; DE
Nathan Villines; Tyler Truss Systems; P; MP
Steve Walker; Steve A. Walker & Associates; P; G
Charlie Weiner; Total Structures, Inc; P; MP
Mike Weston; Encore Global; P; U
R. Duane Wilson; Amer. Society of Theatre Consultants; P; DE
Stephan Jon Wood; Tait Towers Manufacturing LLC; P; CP

Visitors:

Steve Surratt; Texas Scenic Company (ESTA Treasurer)

1 Opening Remarks

Bill Sapsis called the meeting to order at 19:06, welcoming everyone to the meeting, and thanking them for taking time to attend.

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 held up the pamphlet for all to see.

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. New applications shall not be processed until the participation fee has been paid. 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

Everyone introduced themselves.

3.3 Determination of a quorum

There are 76 voting entities after application actions. A quorum is 26, a supermajority is 39.

Richard Nix confirmed that both requirements were met.

3.4 Processing of new membership and status change requests

The following applications or status change requests have been received:

*Scott England; Cirque du Soliel Entertainment Group; P; U (new application)
Paige Kassab; Liberty Mutual Insurance; O; DE (new application)
Benjamin Hague; Benjamin Hague; I; G (new application)
Shelby Obitts; Liberty Mutual Insurance; O; DE (new application)
Chris Ruble; Chris Ruble; I; U (new application)
Chong Kim; CK Engineering, PLLC; O; DE (new application)
Patricio (Pat) Perez; SAG AFTRA; P; G (new application)*

Dan Culhane moved to approve the applications as submitted. 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:

*Chicago Flyhouse, Inc; Ed Leahy
Frontline Rigging & Motion B.V.; Gert Jan Brouwer
Theta Consulting LLC; Tim Franklin*

All were present.

3.5.2 Letter ballot notices

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

*Siobhan Gee; G; Siobhan Gee
Brent Armstrong; CP; Alpine Rigging & Structural Design
John Caudill; DE; Productions Unlimited
Jennifer Ferguson; MP; Kito Group*

3.5.3 Automatic status changes occurring before this meeting

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

None.

3.6 Consensus body

The consensus body, after today's working group meeting's actions, is as follows:

Name	Representing	Status	Int Cat
Brent Armstrong	Alpine Rigging & Structural Design	P	CP
R. Duane Wilson	Amer. Society of Theatre Consultants	P	DE
Peter A. Scheu	Amer. Society of Theatre Consultants	A	DE
Max A. Wilson	Applied Electronics	P	MP
Jon Lenard	Applied Electronics	A	MP
Neil Montour	Atlanta Rigging Systems	P	DR
David Boevers	Carnegie Mellon University	P	DE
Ed Leahy	Chicago Flyhouse, Inc	P	CP
Scott England	Cirque du Soleil Entertainment Group	P	U
Jeffrey M. Reder	Clark-Reder Engineering, Inc.	P	G
Shawn Nolan	Clark-Reder Engineering, Inc.	A	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
Dave Carmack	Dave Carmack Consulting Inc	P	G
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
Cole Muth	Electronic Theatre Controls, Inc.	A	MP
Mike Weston	Encore Global	P	U
Drew Wending	Encore Global	A	U
Demian Purdy	Encore Global	A	U
Tim Salamon	Encore Global	A	U
Greg Williams	Encore Global	A	U
Simon Grant	Encore Global	A	U
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 & Motion B.V.	P	CP
Joe Golden	Gallagher Staging & Productions	P	DR
Ted Jones	Grand Stage	P	U
Zhou Jianzhao	Guangzhou Haoyang Electronic Co., Ltd.	P	CP
Benjamin Hague	Benjamin Hague	I	G
Pat Grenfell	Hoist Sales & Service	P	DR
Edwin S. Kramer	I.A.T.S.E. Local 1	P	U
Marco Robles	I.A.T.S.E. Local 80	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 Production	P	DR
Bruce Darden	InterAmerica Stage, Inc.	P	CP
Drew Becker	InterAmerica Stage, Inc.	A	CP

Name	Representing	Status	Int Cat
Jeremy Hodgson	Jeremy Hodgson	I	G
Jonathan Deull	JSD Projects LLC	P	U
Jennifer Ferguson	Kito Group	P	MP
William B. Gorlin	M.G. McLaren, P.C.	P	G
Peter W. Batt	Mainstage Theatrical Supply, Inc	P	DR
Sam Michael	Sam Michael	I	DE
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
Reid Neslage	Reid Neslage	I	G
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
John Caudill	Productions Unlimited	P	DE
Jay Cid	R&M Materials Handling / Stagemaker	P	MP
Bartholomew J. Mueller	Recreation Engineering Inc.	P	DE
Bennett Brian	Reed Rigging, Inc.	P	DR
Eric Silzer	Reed Rigging, Inc.	A	DR
Elmer Veith	Reliable Design Services	P	CP
Matt Panther	Reliable Design Services	A	CP
Richard J. Nix	Richard J. Nix	I	G
Ryan Riordan	Riordan Rigging LLC	P	U
Robert Haycock	Robert Haycock	I	U
Jesse Adams	Rosebrand Wipers, Inc.	P	DR
Chris Ruble	Chris Ruble	I	U
Stewart Stephens	S2 Technologies	P	G
Patricio (Pat) Perez	SAG-AFTRA	P	G
Bill Sapsis	Sapsis Rigging, Inc.	P	U
Shane Kelly	Shane Kelly	I	U
Joseph Jeremy	Show Distribution Group, Inc.	P	CP
Sanford P. Gilzow	Shur-Rig LLC	P	G
Robert Peterson	Shur-Rig LLC	A	G
Dana Bartholomew	Silver State Wire Rope and Rigging	P	DR
Siobhan Gee	Siobhan Gee	I	G
John Rourke	Stagecraft Industries, Inc	P	DR
Steve Walker	Steve A. Walker & Associates	P	G
Kyle Kusmer	Steven Schaefer Associates, Inc	P	DE
Ryan Niemi	Sunset Dynamics	P	CP
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
Ryan Kunkel	Tait Towers Manufacturing LLC	A	CP
Michael Freeman	Texas Scenic Company	P	MP
Russell Solomon	Texas Scenic Company	A	MP

Name	Representing	Status	Int Cat
Tony Diemont	Texas Scenic Company	A	MP
Jim Niesel	Theatre Projects Consultants, Inc.	P	DE
Jerry Gorrell	Theatre Safety Programs	P	G
Paul Brunner	Thern, Inc.	P	MP
Jeff Wilkowski	Thern, Inc.	A	MP
Tim Franklin	Theta Consulting	P	G
Thomas Cowdery	Thomas Cowdery	I	U
Charlie Weiner	Total Structures, Inc.	P	MP
Nathan Villines	Tyler Truss Systems	P	MP
Bill Edwards	Tyler Truss Systems	A	MP
Josh Conner	Tyler Truss Systems	A	MP
John Shimon	University at Buffalo - SUNY	P	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
Shane Rogers	Warner Bros. Discovery	P	U
Bryan Schafer;	Warner Bros. Discovery	A	U
Peter V. Svitavsky	Wenger Corp.	P	CP
Dan Culhane	Wenger Corp.	A	CP
Paul Zagajeski	Wenger Corp.	A	CP
Robert Dean	ZFX, Inc.	P	CP
Troy Trinkle	ZFX, Inc.	A	CP
Total consensus votes:			80
Votes by interest category	Custom market producers (CP):		13
	Mass market producers (MP):		10
	Designers (DE):		10
	Dealer or rental company (DR):		15
	User (U):		18
	General Interest (G):		14

4 Approval of the minutes from the last meeting

[See RWGmin07-2023r2_Draft.pdf]

Dan Culhane moved to approved the minutes. The motion was seconded and carried without objection or abstention.

5 Approval of agenda

Reid Neslage moved to approve the agenda. The motion was seconded and carried without objection or abstention.

6 Old Business

6.1 BSR E1.1 – 202x, Wire Rope Ladders (Open for revision)

Chris Schmidt (task group leader), Sandy Gilzow, Marco Robles, Pat Bash, and Joe Golden.

By the time of this meeting, the public review will have ended, on 26 September.

Public review comments were received, and will be distributed to the working group.

6.2 ANSI E1.2 - 2021, Entertainment Technology - Design, Manufacture and Use of Aluminum Trusses and Towers (Reaffirm, revise, or withdraw by 06 May 2026).

6.3 ANSI E1.4-1 - 2022, Entertainment Technology--Manual Counterweight Rigging Systems (Reaffirm, revise, or withdraw by 27 October 2027)

6.4 ANSI E1.4-2 - 2021, Entertainment Technology—Statically Suspended Rigging Systems (Reaffirm, revise, or withdraw by 06 May 2026.)

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 working group has three meetings (including this one) to decide which action to take.

Bruce Darden said he has assembled a group of people interested in revising the document. He made a motion to open it for revision. The motion was seconded, and carried without objection or abstention. A PINS will be filed with ANSI.

Bill Sapsis appointed Joe Jeremy, Jesse Adams, Robert Dean, Bill Gorlin, Bruce Darden, Peter Batt, Tracy Nunnally, Stefan Pries, and Joe Golden.

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 ANSI E1.6-4 - 2022, Design, Manufacture, and Inspection of Portable Controls for Electric Chain Hoists in the Entertainment Industry (Revise, reaffirm or withdraw before 30 October 2027)

6.10 ANSI E1.6-5 - 2022, Selection and Use of Portable Controls for Electric Chain Hoists in the Entertainment Industry (Revise, reaffirm or withdraw before 30 October 2027)

6.11 ANSI E1.8 – 2018 (R2023), Entertainment Technology—Loudspeaker Enclosures Intended for Overhead Suspension—Classification, Manufacture and Structural Testing (Revise, reaffirm, or withdraw before 05 September 2028)

It's published!

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)

6.13 ANSI E1.21 - 2023, Entertainment Technology — Temporary Structures Used for Technical Production of Outdoor Entertainment Events (Reaffirm, revise, or withdraw by 18 September 2028).
[See [BSR_E1.21-202x_Rig2023-2003r1 SEPT 2023 LIMITED REVS.pdf](#)]

It's published. But wait...there's more! Expect a motion to open the latest version for a limited revision, to address three items noted in the distribution document.

Bill Gorlin moved to open E1.21 for limited revision to specifically address the changes needed to fix the IBC references. An annotated version was opened for all to see the scope of necessary changes. The motion was seconded, and carried without objection or abstentions. A PINS will be filed with ANSI.

Bill Gorlin moved to send the draft to public review immediately following the 30-day PINS response end date. The motion was seconded and carried without objection or abstention.

[TSM note: the PINS has been filed. The PINS response period ends on 26 November. The public review will commence on 01 December 2023, ending on 15 January]

6.14 ANSI E1.22 - 2022, Entertainment Technology - Fire Safety Curtain Systems (Reaffirm, revise, or withdraw by 25 April 2027).

6.15 ANSI E1.39 - 202x, Entertainment Technology –Selection and Use of Personal Fall Arrest Systems on Portable Structures Used in the Entertainment Industry (Reaffirm, revise, or withdraw by 06 May 2026).

6.16 BSR E1.43 - 202x, Live performer flying effect standard (Open for revision) *Task group members:* Eric Rouse (task group leader), Jonathan Deull, Ryan Kunkel, Robert Dean, Tracy Nunnally, Bill Gorlin, and Stewart Stephens.

The first public review ended on 26 September. Comments were received, and a comment summary has been distributed.

Eric Rouse said that they have completed draft resolutions. They'll be sent to the working group.

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

6.18 BSR E1.50-1 – 202x, Requirements for the Structural Support of Temporary LED, Video & Display Systems (Open for revision). *Task Group Members:* Charlie Weiner, Stefan Pries, Siobhan Ghee, Joe Golden, Sandy Gilzow (Task group leader), Robert Peterson, Steve Walker, and Richard Nix

The first public review ended on 26 September. Comments were received, and a comment summary has been distributed.

Sandy Gilzow reported. The task group will be meeting next week.

6.19 BSR E1.56 - 202x, Rigging Support Points Design, Fabrication, Installation, and Testing (Open for revision) *Task Group members:* Shawn Nolan (leader), Dan Culhane, Steve Walker, Chris Schmidt, Robert Dean, Shane Kelly

Any news or action?

Dan Culhane reported. He said Shawn Nolan sends his regrets. The task group has been meeting and they are working on it.

6.20 ANSI E1.67 – 2021, Design, Inspection, Maintenance, Selection, and Use of Hand-operated Chain-and Lever Hoists for the Entertainment Industry (Reaffirm, revise, or withdraw by 06 May 2026).

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

Any news or action?

Ethan Gilson sent a working draft that will be distributed to the working group. It's available on the listfile page. He said he'd have a draft to consider by end of November.

7 New business

7.1 Question about E1.2 and welding certification

[see *Quick question about intent on E1.2.pdf*]

From ANSI E1.2 – 2021:

4.3.1 *All welders involved in producing modules through the welding process shall be certified in accordance with AWS Standards D1.1/D1.1M-03 and D1.2/D1.2M-04.*

Tim Franklin explained his concern and reason for the question. He's encountering truss manufactured outside of the US that may or may not meet the requirements, because those welders may not be AWS certified. There was discussion.

Richard Nix said he'd read a 2008 version of AWS D1.2, said it appeared as though meeting the requirements of that document didn't explicitly require AWS certification, so any welder who has demonstrated qualifications with a WPGR to a specific Weld Performance Specification (WPS) might be considered as "certified in accordance with AWS D1.2.", so the requirement presents no undue restriction or burden. He said he is not a welder and doesn't claim to know what the intent of the 2008 version, or the current version of AWS D1.2 might be. He noted that the welding references in E1.2 are outdated, and there is a steel welding code of practice in a standard pertaining to Aluminum truss.

Charlie Weiner said he thought the intent was to only allow US certified welders. Richard Nix said he didn't think ESTA's attorney would like the restraint of trade implication. Luke Lewkowics said he is an attorney, and explained how this could be taken either way.

Dan Culhane moved to open it for limited revision to address welding processes and associated welding standards references. Seconded. A PINS will be filed.

Meanwhile Bill Sapsis directed Richard Nix to send out an informal request for clarification to truss manufacturers based outside of the US, but sell their products within the US, as to how this requirement impacts their US business.

7.2 New Project Request: Rigging system signage

[see TSP_ProjectRequest - Entertainment Technology - Rigging System Signage.pdf]

This is a new project request for rigging system-specific signage requirements.

Chris Kaiser recapped the project request.

Tyler DeLong asked if this wasn't already covered in the specific standards. Chris said no, some don't have any signage requirements, and following ANSI Z575 requirements for color coding, etc can be confusing.

Bruce Darden moved to approve the new project request. The motion was seconded and approved without objection or abstention.

Chris Kaiser volunteered to lead the group. She appointed Peter Scheu, Pete Svitavsky, Peter Batt, Michael Freeman, Camille Petrillo, and Ed Leahy.

The TSC will consider it tomorrow. A PINS will be filed.

8 Other business and announcements

8.1 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 deadline for nominations is 01 November.

9 Schedule for future meetings

The meeting schedule is posted at <http://www.esta.org/ESTA/meetings.php>. The Winter meetings will be held in conjunction with NAMM Show 2024, in Anaheim, CA during the week of 22 January 2024. The Spring meetings will occur in conjunction with the USITT conference in Seattle, WA, during the week of 18 March 2024. The Summer meetings will be held in NYC, in conjunction with the NATEAC conference, during the week of 08 July 2024. The Fall 2024 meetings will likely return to Westlake, TX.

Richard Nix said that the NATEAC planning committee was seeking presentation proposals for the NATEAC conference in July. Anyone interested should go to the ESTA home page, and click the NATEAC Banner icon to be redirected to a proposal submittal form.

10 Adjournment

The agenda business being completed, with no further business brought forth, Bill Sapsis adjourned the meeting at 20:36.

Rigging Working Group members as of 07 Oct 2023

Name	Representing	Status	Int cat
Jesse Adams	Rose Brand Wipers, Inc	P	DR
Matthew Antonucci	Contract Services Administration Trust Fund	O	U
Jane Harrington, ARM	The Hartford Group	O	G
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	O	DR
Ian Bevan	Walt Disney Company	P	DE
Roy Bickel	Roy Bickel	O	G
Tyler Bland	Walt Disney Company	O	U
David Boevers	Carnegie Mellon University	P	DE
Bennett Brian	Reed Rigging Inc.	P	DR
Gert Jan Brouwer	Frontline Rigging & Motion B.V.	P	CP
Paul Brunner	Thern, Inc.	P	MP
David M. Campbell	Geiger Engineers	O	G
David Carmack	Dave Carmack Consulting, Inc.	P	G
John Caudill	Productions Unlimited	P	DE
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
Darren Coats	Safety Factor Training and Consulting	O	U
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
Bruce Darden	InterAmerica Stage, Inc.	P	CP
David Darland	Encore Global	O	U
Robert Dean	ZFX, Inc.	P	CP

Rigging Working Group members as of 07 Oct 2023

Name	Representing	Status	Int cat
Tyler DeLong	DeLong Rigging Solutions	P	U
Jonathan Deull	JSD Projects LLC	P	U
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
Scott England	Cirque du Soliel Entertainment Group	P	U
Jennifer Ferguson	Kito Group	P	MP
Nick Fleming	Columbus McKinnon Corp.	A	MP
Tim Franklin	Theta Consulting LLC	P	G
Michael Freeman	Texas Scenic Company	P	MP
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
Tiny Good	Showtech Australia	O	U
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
Simon Grant	Encore Global	A	U
Pat Grenfell	Hoist Sales & Service	P	DR
Benjamin Hague	Benjamin Hague	I	G
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	Robert Haycock	I	U
Chris Higgs	Total Solutions Group	O	G
Jeremy Hodgson	Jeremy Hodgson	I	G
Donald Hoffend_III	Avista Designs, LLC	O	G
Quinten James	Flying By Troy	O	U
Joseph Jeremy	Lefrancois Family Trust	P	CP

Rigging Working Group members as of 07 Oct 2023

Name	Representing	Status	Int cat
Zhou Jianzhao	Guangzhou Haoyang Electronic Co., Ltd.	P	CP
Ted Jones	Grand Stage	P	U
Matt Jordan	Production Resource Group	A	DR
Christine L. Kaiser	Syracuse Scenery & Stage Lighting Co., Inc.	P	DR
Paige Kassab	Liberty Mutual Insurance	O	DE
Shane Kelly	Shane Kelly	I	U
Chong Kim	CMK Engineering, PLLC	O	DE
Jerald Kraft	Electronic Theatre Controls, Inc	O	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
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
Ryan McAlpine	Foy Invention Enterprises, Inc.	O	DR
Sam Michael	Sam Michael	I	DE
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
Bartholomew J. Mueller	Recreation Engineering Inc.	P	DE
Cole Muth	Electronic Theatre Controls, Inc.	A	MP
John Neal	Rhino Staging	O	G
Reid Neslage	Reid Neslage	I	G
Ryan Niemi	Sunset Dynamics	P	CP
Jim Niesel	Theatre Projects Consultants, Inc.	P	DE
Richard J. Nix	Richard J. Nix	I	G
Shawn Nolan	Clark-Reder Engineering, Inc.	A	G
Tracy Nunnally	Vertigo	P	CP
Shelby Obitts	Liberty Mutual Insurance	O	DE
Gregory Orth	WNP Services, Inc.	O	DR

Rigging Working Group members as of 07 Oct 2023

Name	Representing	Status	Int cat
Daniel Louis, P.E.	Daniel Louis, P.E.	O	DE
Matt Panther	Reliable Design Services	A	CP
Miriam Paschetto	Geiger Engineers	O	DE
Patricio (Pat) Perez	SAG AFTRA	P	G
Robert Peterson	Shur-Rig LLC	A	G
Camille Petrillo	Sapsis Rigging, Inc.	O	U
Kurt Pragman	Pragman Associates, LLC	O	G
Stefan Pries	NEP Live Events	P	DR
Demian Purdy	Encore Global	A	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	Riordan Rigging LLC	P	U
Marco Robles	I.A.T.S.E. Local 80	P	U
Ryan Roby	Ryan Roby	O	U
Shane Rogers	Warner Bros. Discovery	P	U
John Rourke	Stagecraft Industries, Inc.	P	DR
Eric Rouse	Entertainment Project Services, LLC	P	CP
Chris Ruble	Christopher Ruble	I	U
Tim Salamon	Encore Global	A	U
Bill Sapsis	Sapsis Rigging, Inc.	P	U
Bryan Schafer	Warner Bros. Discovery	A	U
Peter A. Scheu	Amer. Society of Theatre Consultants	A	DE
Chris Schmidt	Freeman Companies	A	DR
Daniel Schmidt	Western Illinois University	O	U
Donald Scott	Structural Engineering Institute of ASCE	O	DE
Ford Sellers	Chauvet Lighting	O	MP
Steven Serafin	The Hartford Group	O	G
Michael Shaw	Motion Laboratories, Inc.	A	MP
Jonathan Shimon	University at Buffalo - SUNY	P	U
Harold Ike Shippers	Syracuse Scenery & Stage Lighting Co., Inc.	A	DR
Eric Silzer	Reed Rigging, 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 07 Oct 2023

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	MP
Todd Spencer	Ventana Capital Investments LLC	O	G
Stewart Stephens	S2 Technologies	P	G
Patrick Stewart	Patrick Stewart	O	U
Peter V. Svitavsky	Wenger Corp.	P	CP
Ross Taylor	Taylor & Taylor Associates	O	G
Jason Tello	T6 Truss Designs. LLC	O	CP
Ken Tilson	Columbus McKinnon Corp.	P	MP
Will Todd	Area Four Industries	O	MP
Troy Trinkle	ZFX, Inc.	A	CP
Stephen Vanciel	IATSE Local 631	O	U
Elmer Veith	Reliable Design Services	P	CP
Michael Viau	Pinnacle Live	O	DE
Nathan Villines	Tyler Truss Systems	P	MP
Steve Walker	Steve A. Walker & Associates	P	G
Jason S. Waller	GIS Corporation US	O	MP
Mike Webb	Motion Laboratories, Inc.	A	MP
Charlie Weiner	Total Structures, Inc	P	MP
Drew Wending	Encore Global	A	U
Marty Wesstrom	Mountain Productions Inc.	O	DR
Mike Weston	Encore Global	P	U
Jeff Wilkowski	Thern, Inc.	A	MP
Greg Williams	Encore Global	A	U
R. Duane Wilson	Amer. Society of Theatre Consultants	P	DE
Max A. Wilson	Applied Electronics	P	MP
Allen Winzler	Entertainment and Rigging Engineering	P	DE
Stephan Jon Wood	Tait Towers Manufacturing LLC	P	CP
Jeong Sik Yoo	Ghost LX	O	DE
Andrew Young	Andrew Young	O	U
Paul Zagajeski	Wenger Corp.	A	CP