

Minutes
Rigging Working Group
Thursday, 13 April 2023
Wyndham Anaheim + WebEx

Chairpersons:

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

Recording Secretary:

Richard Nix (ESTA)

Attendees:

Jane Harrington, ARM; The Hartford Group; O; G
Brent Armstrong; Alpine Rigging & Structural Design; P; CP
William Ian Auld; Auld Entertainment; O; U
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
Ian Bevan; Walt Disney Company; P; DE
Bennett Brian; Reed Rigging Inc.; P; DR
Paul Brunner; Thern, Inc.; P; MP
David Carmack; Dave Carmack Consulting, Inc.; P; G
John Caudill; Productions Unlimited; P; 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
Jennifer Ferguson; Kito Group; P; MP
Nick Fleming; Columbus McKinnon Corp.; A; MP
Mike Garl; Mike Garl Consulting LLC; P; DE
Siobhan Gee; Siobhan Gee; I; G
Ethan W Gilson; Entertainment Rigging Services, LLC; P; U
Sanford P. Gilzow; Shur-Rig LLC; P; G
Joe Golden; Gallagher Staging & Productions; P; DR
Tiny Good; Showtech Australia; O; U
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; Robert Haycock; I; U
Jeremy Hodgson; Jeremy Hodgson; I; G
Joseph Jeremy; Show Distribution Group, Inc.; P; CP
Zhou Jianzhao; Guangzhou Haoyang Electronic Co., Ltd.; P; CP
Ted Jones; Grand Stage; P; U
Jerald Kraft; Electronic Theatre Controls, Inc; O; MP
Edwin S. Kramer; I.A.T.S.E. Local 1; P; U
Kyle Kusmer; Steven Schaefer Associates, Inc; P; DE
Ross Long; I.A.T.S.E. Local 891; A; U
Sam Michael; Sam Michael; I; DE
Orestes Mihaly; Production Resource Group; P; DR
Neil Montour; Atlanta Rigging Systems; P; DR
Cole Muth; Electronic Theatre Controls, Inc.; A; MP
Reid Neslage; Reid Neslage; I; G
Jim Niesel; Theatre Projects Consultants, Inc.; P; DE
Shawn Nolan; Clark-Reder Engineering, Inc.; A; G
Tracy Nunnally; Vertigo; P; CP

Stefan Pries; NEP Live Events; P; DR
Demian Purdy; Encore Global; A; U
Ryan Riordan; Riordan Rigging LLC; P; U
Marco Robles; I.A.T.S.E. Local 80; P; U
Shane Rogers; Warner Bros. Discovery; P; U
John Rourke; Stagecraft Industries, Inc.; P; DR
Eric Rouse; Entertainment Project Services, LLC; P; CP
Tim Salamon; Encore Global; A; U
Bryan Schafer; Warner Bros. Discovery; A; U
Chris Schmidt; Freeman Companies; A; DR
Steven Serafin; The Hartford Group; O; G
Mike Skinner; Contract Services Administration Trust Fund; P; U
Stewart Stephens; S2 Technologies; P; G
Patrick Stewart; Patrick Stewart; O; U
Ken Tilson; Columbus McKinnon Corp.; P; MP
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
Mike Weston; Encore Global; P; U
R. Duane Wilson; Amer. Society of Theatre Consultants; P; DE
Allen Winzler; Entertainment and Rigging Engineering; P; DE
Stephan Jon Wood; Tait Towers Manufacturing LLC; P; CP
Andrew Young; Andrew Young; O; U

1 Opening Remarks

2 Patent and anti-trust statements

Called to order at 19:05

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 easy-to-read 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. Voting members are required to attend meetings and vote on letter ballots. Any principal member and alternate that both miss three consecutive meetings or that miss three consecutive letter ballots will have their membership status changed to observer. This action will be taken at the beginning of the first meeting after such inaction and will be recorded in the minutes of that meeting.

Richard Nix reminded everyone that the TSP renewal emails had gone out on 03 February. Anyone who has seen it and not acted on it, please do so. Anyone who has not seen it please look for it. Those who cannot find it are asked to contact Richard immediately after the meeting.

3.2 Introduction of attendees

3.3 Determination of a quorum

There are 75 voting entities after application actions. A quorum is 26, a supermajority is 38.

Richard Nix confirmed that the requirements for both a quorum and a supermajority were met, before and after meeting actions.

3.4 Processing of new membership and status change requests

The following applications or status change requests have been received:

*John Rourke; Stagecraft Industries, Inc.; P; CP (applied as Alternate, but there is no Principal)
Shane Rogers; Warner Bros. Discovery; P; U
Bryan Schafer; Warner Bros. Discovery; A; U
Dave Carmack; Dave Carmack Consulting Inc; P; G
Jane Harrington; The Hartford Group; O; G
Michael Freeman; Texas Scenic Co; P; MP (Applied as MP, this fits better with what they do)
Eric Silzer; Reed Rigging, Inc; A; DR
Reid Neslage; Reid Neslage; I; G
Sam Michael; Sam Michael; I; DE
Charlie Weiner; Total Structures, Inc; P; MP (status change request)
Ted Jones; Grand Stage; P; U (status change request)
Jane Ferguson; Harrington USA; P; MP (status change request)
Marco Robles; I.A.T.S.E. Local 80; P; G (status change request)
Patt Bash; In-House Productions; P; DR (status change request)*

Ethan Gilson moved to accept the applications as submitted, with any new applicant applying for voting status not present accepted as Observer. The motion was seconded and carried without objection or abstention.

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:

*Gallagher Staging & Productions- Joe Golden
Jeremy Hodgson
NEP Live Events – Stephan Pries
Rose Brand Wipers, Inc – Jesse Adams
Silver State Wire Rope and Rigging – Dana Bartholomew
Siobhan Gee
Ventana Capital – Todd Spencer*

Neither Jesse Adams nor Todd Spencer were present, so their status was changed.

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.

There are none.

3.5.3 Automatic status changes occurring before this meeting

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

Reid Neslage (retired from Texas Scenic), see above.

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
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
Daniel Louis, P.E.	Daniel Louis, P.E.	I	DE
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

Name	Representing	Status	Int Cat
Miriam Paschetto	Geiger Engineers	P	DE
Ted Jones	Grand Stage	P	U
Zhou Jianzhao	Guangzhou Haoyang Electronic Co., Ltd.	P	CP
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
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
Andrew Volk	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
Stewart Stephens	S2 Technologies	P	G
Bill Sapsis	Sapsis Rigging, Inc.	P	U
Shane Kelly	Shane Kelly	I	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
Robert Peterson	Shur-Rig LLC	A	G
Dana Bartholomew	Silver State Wire Rope and Rigging	P	DR
Siobhan Gee	Siobhan Gee	I	G

Name	Representing	Status	Int Cat
John Rourke	Stagecraft Industries, Inc	P	DR
Steve Walker	Steve A. Walker & Associates	P	G
Kyle Kusmer	Steven Schaefer Associates, Inc	P	DE
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	DR
Tony Diemont	Texas Scenic Company	A	DR
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
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:			75
Votes by interest category	Custom market producers (CP):		12
	Mass market producers (MP):		10
	Designers (DE):		13
	Dealer or rental company (DR):		14
	User (U):		15
	General Interest (G):		11

4 Approval of the minutes from the last meeting

[See RWGmin01-2023_DRAFT.pdf]

Dan Culhane moved to approve. Seconded. Carried with no objection and one abstention (Patt Bash)

5 Approval of agenda

Dan Culhane moved. Seconded. Carried with no objection and no abstentions.

6 Old Business

6.1 ANSI E1.1 – 2018, Wire Rope Ladders (Reaffirm, revise, or withdraw by 27 September 2023)

The working group has to decide which action to take at this meeting, or at the July meeting.

Chris Schmidt said he is willing to lead the revision. He noted the clause stating “...effective date of one year...”, asking if this caused any concern with anyone.

Tim Hansen moved to open the document up for revision. The motion was seconded and carried without objection or abstention. A PINS will be filed with ANSI.

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

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)

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, Entertainment Technology—Loudspeaker Enclosures Intended for Overhead Suspension—Classification, Manufacture and Structural Testing (Reaffirm, revise, or withdraw by 29 November 2023)

Excerpted from the draft January minutes:

Richard Nix suggested everyone read the standard, then come to the next meeting prepared to consider a motion to reaffirm.

Any news or action?

Dan Culhane moved to send the document to public review for reaffirmation, followed by a letter ballot.

A PINS will be filed with ANSI

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 BSR E1.21 - 202x, Entertainment Technology — Temporary Structures Used for Technical Production of Outdoor Entertainment Events (open for revision) *Task group members:* Richard Nix (task group leader), Bill Gorlin, Dan Louis, Sandy Gilzow, Kyle Kusmer, Elmer Veith, Ryan Riordan, Joe Golden, Shawn Nolan, Allen Winzler, and Donald Scott.
[see BSR_E1.21-202x_Rig2023-2003r0.pdf]

The task group has submitted a revised draft for working group discussion and consideration.

Richard Nix summarized the document distributions over the past two weeks. He moved to send the current version to public review. The motion was seconded. There was discussion. Bill Gorlin gave a history of the document's recent development with regard to its current status in the codes. He said this is one of the most important developments with this standard in a very long time.

John Caudill asked how it will impact tents. Richard explained that those structures have their own section in the building code.

Bill Gorlin said he wanted to discuss the deleted provision for wind funneling effects. Richard Nix explained that the building code does not permit this methodology, and that Bill was the only engineer on the task group who felt this important enough to discuss. Everyone else on the task group feels it is important to delete the clause, and thus eliminate any direct conflict with code. The engineer still has the ability to use, and to defend, this methodology using the same type of engineering judgment that would be permitted under alternative design considerations. The task group consensus is to let the engineer address this outside of the E1.21 scope. The main motion to send the latest E1.21 draft to public review carried without objection or abstention.

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 Duell, Ryan Kunkel, Robert Dean, Tracy Nunnally, Bill Gorlin, and Stewart Stephens.

Any news or updates?

Eric Rouse read a long statement and pasted it in the chat. Then Bill Gorlin gave a lengthy background history. He talked about Type A and Type B systems.

Robert Dean said that the current version allows lower design factors using a RA/RR process, with a site acceptance test, which takes time. The Type B systems allow systems that are used in typical configurations to not require as much effort to implement a tried and true, audited system.

Mike Weston said he has no issue with Type A/Type B format, except that Type B is not a defined term. When he reads a standard, he doesn't read the definitions first.

Richard Nix said that if the entire document is considered as the primary basis for what is now called "Type A", and the Type B is the exception, then why confuse the reader with two types, when only one type (the "exception") is necessary. He said that the exception represents an audited system, which differs from the base, unaudited system.

Robert Dean explained some of the issues he has experienced because of the increased design factors: larger wire rope, but same diameter pulleys, so the wire experiences higher degrees of rope fatigue.

Shawn Nolan commented on how E1.6 evolved.

Stephan Pries asked if it was possible to consider separating the Type A and Type B systems into two separate standards, since the concept seems to be so complex to resolve. Tracey Nunnally said that has been discussed. Robert Dean said he's been working on this draft for 3 years, so he wants to be done with this version first.

Ethan Gilson suggested finding another single term instead of two terms (Types A & B).

Joe Jeremy said he liked the audited system approach.

Jerry Gorrell said it sounds like this relates to something like previously assembled systems, like an assembly line. Shawn Nolan agreed, saying that this is like a serially manufactured product.

Bill Gorlin suggested calling it an audited pre-packaged system.

Bill Sapsis said he thinks this is a suggestion to take back to the task group. He reminded everyone that we should think globally. He thanked Eric and the task group for their hard work. He added that anyone having further comments should direct them to Eric or other task group members.

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

Any news or updates?

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

Any news or updates?

Charlie Weiner reported that they have some issues sorted out and plan to have something back to the working group in time for the July meetings.

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

The working group has two more meetings, after this meeting, to decide what to do.

Shawn Nolan said he would be willing to take this on, since he was the original task group leader. He will send out a few feelers to see what needs to be done. Bill said we will keep this informal for now, and wait until July's meeting.

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

Excerpted from the draft January meeting minutes:

Ethan Gilson reported "...they are now moving forward, and hope to have something by next meeting."

Any news or action?

Ethan Gilson said he has not been pushing too hard on the task group. He said he will do better. [TSM note: The PINS for the project was filed in 2020, and there has been no action since.]

7 New business

[See Tiny_Good_Email_request_RWGfeedback.pdf]

Bill Sapsis brought up the email from Tiny Good, forwarded to the working group a few days ago. He recapped the email, then turned the floor over to Tiny. Tiny Good explained his problem in Australia – essentially that their equivalent of OSHA has deemed 18,000 some-odd hoists currently in use to be illegal because their use is not consistent with the manufacturer's usage requirements. The primary issue is that the manufacturer's use manuals say the hoists cannot be used the way we normally use them in our industry.

Tracey Nunnally said one of the first things added to E1.43 regarding attaching to equipment like hoists not approved for use, is that the user is responsible for the risk management.

Robert Dean said he would introduce Tiny to someone in Europe who deals with this type of thing.

William Auld suggested inserting a requirement for competent persons to use good judgment when using this equipment.

Stefan Pries said he would try to introduce Tiny to some of the German industry professionals who train over in Australia, since they have a long history of dealing with things like this.

Tiny Good thanked everyone for their input.

8 Other business and announcements

Chris Schmidt asked if addressing the use of material handlers in our industry is of any interest. Marco Robles said I.A.T.S.E. Local 80 Contract Services is currently working on this with a manufacturer. They are in the process of developing some guidelines.

Bill Sapsis suggested that if anyone is interested in starting a new project, submit a New Project Request form.

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 Summer and Fall meetings will both return to the Marriott DFW Westlake, the week of 17 July, and 02 October 2023, respectively.

10 Adjournment

The agenda being complete, there being no further business brought forth, Bill Sapsis declared the meeting adjourned at 20:50.

Rigging Working Group members as of 13 Apr 2023

Name	Representing	Status	Int cat
Jesse Adams	Rose Brand Wipers, Inc	O	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
Tyler DeLong	DeLong Rigging Solutions	P	U
Jonathan Deull	JSD Projects LLC	P	U
Tony Diemont	Texas Scenic Company	A	MP
Jim Digby	Event Safety Alliance	O	U
Brad Dittmer	Stage Labor of the Ozarks	O	U

Rigging Working Group members as of 13 Apr 2023

Name	Representing	Status	Int cat
Russ Dusek	I Weiss	O	MP
Don Earl	Earl Girls, Inc.	P	DR
Bill Edwards	Tyler Truss Systems	A	MP
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
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	Show Distribution Group, Inc.	P	CP
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
Shane Kelly	Shane Kelly	I	U
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

Rigging Working Group members as of 13 Apr 2023

Name	Representing	Status	Int cat
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 Invenenterprises, Inc.	O	DR
Bill McIntyre	Show Distribution Group, Inc.	A	CP
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
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
Gregory Orth	WNP Services, Inc.	O	DR
Daniel Louis, P.E.	Daniel Louis, P.E.	I	DE
Matt Panther	Reliable Design Services	A	CP
Miriam Paschetto	Geiger Engineers	P	DE
Robert Peterson	Shur-Rig LLC	A	G
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
Tim Salamon	Encore Global	A	U

Rigging Working Group members as of 13 Apr 2023

Name	Representing	Status	Int cat
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
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
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
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
Michael Wells	Xtreme Structures and Fabrication	O	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

Rigging Working Group members as of 13 Apr 2023

Name	Representing	Status	Int cat
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