

Minutes
Rigging Working Group
Thursday, 21 January 2010
Dallas/Ft. Worth Marriott Solana
Westlake, TX

Chairman: Bill Sapsis; Sapsis Rigging, Inc.; P; U

Recording secretary: Karl G. Ruling; ESTA

Members attending:

Woody Pyeatt; A V Pro, Inc.; P; DR
Ethan William Gilson; Advanced Lighting and Production Services; P; U
William Bradburn; Aerial Arts, Inc.; P; U
Wendy Holt; AMPTP/CSATF, representing the Alliance of Motion Picture and Television Producers; P; G
Herb Hart; Columbus McKinnon Corp.; P; MP
Edward A. (Ted) Paget; Vortek Rigging Division (Daktronics Inc.); P; CP
M. Brad Dittmer; Downhome Productions; P; U
Harvey Sweet; Electronic Theatre Controls, Inc.; P; MP
Dana Bartholomew; Fisher Technical Services, Inc.; P; CP
Rocky Paulson; Stage Rigging, Inc. (Freeman Companies); P; DR
John Ringelman; Stage Rigging, Inc. (Freeman Companies); A; DR
Miriam Paschetto; Geiger Engineers; P; G
Reid Neslage; H & H Specialties Inc.; P; MP
Ed Garstkiewicz; Harting Inc., North America (Harting KGAA); P; G
Jody Williquette; Harting Inc., North America (Harting KGAA); A; G
Edwin S. Kramer; I.A.T.S.E. Local 1; P; U
Roger Lattin; I.A.T.S.E. Local 728; P; U
Peter V. Svitavsky; J.R. Clancy Inc.; P; CP
Mike Garl; James Thomas Engineering, Inc.; P; MP
Tray Allen; James Thomas Engineering, Inc.; A; MP
Greg Herald; Kleege Industries; P; U
William B. Gorlin; McLaren Engineering Group (M.G. McLaren, P.C.); P; G
Martin Moore; I; G
Peter Herrmann; Motion Laboratories; A; CP
Ron Bonner; PLASA; P; G
John (Jack) Miller; Scenic Technologies (Production Resource Group); P; CP
Rick Montgomery; R&M Materials Handling; P; MP
Daniel Lynn Houser; Real Rigging Solutions, LLC; P; U
Shawn Nolan; Reed Rigging, Inc.; P; DR
Bruce Darden; Rigging Innovators, Inc.; P; CP
Kimberly Corbett; Schuler Shook; P; G
Jean-Philippe Robitaille; Show Distribution Group, Inc.; P; DR
Mark Ager; Stage Technologies; P; CP
Richard J. Nix; Entertainment Structures Group (Steven Schaefer Associates); P; G
Christine L. Kaiser; Syracuse Scenery & Stage Lighting Co., Inc.; P; DR
Jeff Wilkowski; Thern, Inc.; P; MP
Tim Franklin; Theta-Consulting; O; G
Adrian Forbes-Black; Total Structures Inc.; P; MP
Keith Bohn; Tomcat USA, Inc. (Vitec Group plc); P; MP
Will Todd; Tomcat USA, Inc. (Vitec Group plc); A; MP
Michael Wells; Xtreme Structures & Fabrication; O; CP

Visitors:

Don Dimitroff; Tomcat

Bill Krokaugger; Mole Richardson
Sanford P. Gilzow; Shur-Rig LLC

1 Opening remarks

Bill Sapsis called the meeting to order at 13:05. He said that more chairs are coming—there are never enough chairs. He thanked all those attending for taking the time and bearing the expense of attending this meeting, which is particularly admirable in this "roller coaster economy."

2 Attendance and membership

2.1 Introduction of those present

Those present introduced themselves.

2.2 Circulation of attendance sign-in sheet

A muted teal attendance sign-in sheet was circulated, and those present were instructed to sign in.

2.3 Call for quorum

Bill Sapsis asked for a show of hands of voting members. He counted 32 and announced the presence of a quorum and enough votes to pass a motion requiring a supermajority.

2.4 Requirements for membership

Sapsis reminded the assembly that membership is open to all who are affected by the work of the group. People who would be in the dealer/rental company or user interest groups are particularly encouraged to join. However, voting members are required to attend meetings and to vote on letter ballots. Any principal member and voting alternate who both miss three consecutive meetings or letter ballots will have their membership status changed to observer.

2.5 Changes of membership status resulting from lack of attendance.

The following voters and their alternates have missed the last two consecutive meetings, and will be moved to observer status if they miss this one:

William Bradburn; Aerial Arts, Inc.
Ted Jones; Chicago Spotlight
Nathan Wells; Stage Technologies
Eugene Leitermann; Theatre Projects Consultants
Pete Happe; Walt Disney Company

William Bradburn was present, so there was no change to his voting status.

Ted Jones was not present, so Bill Sapsis announced that he is now an observer member.

Nathan Wells was not present, but Mark Ager was applying as a voting member, and as soon as he would be voted in, Stage Technologies would have a member present and would not have missed three consecutive meetings, so no change was made to Wells's voting status.

Eugene Leitermann was not present, so Sapsis announced that he is now an observer member.

Pete Happe was not present, so Sapsis announced that he is now an observer member.

2.6 Processing of new membership requests

The following applications were pending at the start of the meeting:

- Mark Ager; Stage Technologies; principal (N. Wells changes to alternate); CP (changed from MP)
- Greg Herald; Kleege Industries; principal; U
- Jean-Philippe Robitaille; Show Distribution Group, Inc.; principal; DR

- Daniel J. Clark; Clark-Reder Engineering, Inc.; principal; G

Daniel Clark was not present.

Eddie Kramer moved that the applications be accepted, with the exception that Daniel Clark be admitted as an observer. The motion was seconded and then approved with a show of hands.

2.7 The consensus body

The full consensus body during this meeting, including voters not present, was:

Name	Company	Representing (This is the sort field.)	Voting status	Int. cat.
Woody Pyeatt	A V Pro, Inc.	A V Pro, Inc.	P	DR
Ethan William Gilson	ALPS	Advanced Lighting and Production Services	P	U
William Bradburn	Aerial Arts, Inc.	Aerial Arts, Inc.	P	U
Wendy Holt	AMPTP/CSATF	Alliance of Motion Picture and Television Producers	P	G
William Conner	Bill Conner Associates LLC	Amer. Society of Theatre Consultants	P	U
R. Duane Wilson	George C. Izenour Associates	Amer. Society of Theatre Consultants	A	U
Jon Lenard	Applied Electronics	Applied Electronics	P	MP
James Niesel	Arup	Arup	P	G
Donald A. Hoffend, Jr.	Avista Designs, LLC	Avista Designs, LLC	P	G
Charlie Weiner	Charlie Weiner	Charlie Weiner	P	U
Herb Hart	Columbus McKinnon Corp.	Columbus McKinnon Corp.	P	MP
Edward A. (Ted) Paget	Vortek Rigging Division	Daktronics Inc.	P	CP
Pat Grenfell	Vortek	Daktronics Inc.	A	CP
M. Brad Dittmer	Downhome Productions	Downhome Productions	P	U
Harvey Sweet	Electronic Theatre Controls, Inc.	Electronic Theatre Controls, Inc.	P	MP
Michael Lichter	Electronic Theatre Controls, Inc.	Electronic Theatre Controls, Inc.	A	MP
Dana Bartholomew	Fisher Technical Services, Inc.	Fisher Technical Services, Inc.	P	CP
Rocky Paulson	Stage Rigging, Inc.	Freeman Companies	P	DR
John Ringelman	Stage Rigging, Inc.	Freeman Companies	A	DR
Miriam Paschetto	Geiger Engineers	Geiger Engineers	P	G
Reid Neslage	H & H Specialties Inc.	H & H Specialties Inc.	P	MP
Ed Garstkiewicz	Harting Inc., North America	Harting KGAA	P	G
Jody Williquette	Harting Inc., North America	Harting KGAA	A	G
Edwin S. Kramer	I.A.T.S.E. Local 1	I.A.T.S.E. Local 1	P	U
Roger Lattin	I.A.T.S.E. Local 728	I.A.T.S.E. Local 728	P	U
Kent Jorgensen	I.A.T.S.E. Local 80	I.A.T.S.E. Local 80	P	G
Peter V. Svitavsky	J.R. Clancy Inc.	J. R. Clancy Inc.	P	CP
Rodney F. Kaiser	J.R. Clancy Inc.	J.R. Clancy, Inc.	A	CP
Thomas S. Young	J.R. Clancy Inc.	J.R. Clancy, Inc.	A	CP
Mike Garl	James Thomas Engineering, Inc.	James Thomas Engineering, Inc.	P	MP
Tray Allen	James Thomas Engineering, Inc.	James Thomas Engineering, Inc.	A	MP
Greg Herald	Kleege Industries	Kleege Industries	P	U
William Beautyman	Limelight Productions, Inc.	Limelight Productions, Inc.	P	DR

Name	Company	Representing (This is the sort field.)	Voting status	Int. cat.
Bob Medve	Limelight Productions, Inc.	Limelight Productions, Inc.	A	DR
William B. Gorlin	McLaren Engineering Group	M.G. McLaren, P.C.	P	G
Martin Moore	Martin Moore	Martin Moore	I	G
Vincent J. Cannavale	Motion Laboratories	Motion Laboratories	P	CP
Peter Herrmann	Motion Laboratories	Motion Laboratories	A	CP
David Herrmann	Motion Laboratories	Motion Laboratories	A	CP
Shawn Sack	Mountain Productions Inc.	Mountain Productions Inc.	P	DR
Donald Halchak	Mountain Productions Inc.	Mountain Productions Inc.	A	DR
Tim Hansen	Oasis Stage Werks	Oasis Stage Werks	P	DR
Spencer Brown	Oasis Stage Werks	Oasis Stage Werks	A	DR
Ron Bonner	PLASA	PLASA	P	G
John (Jack) Miller	Scenic Technologies	Production Resource Group	P	CP
Rick Montgomery	R&M Materials Handling	R&M Materials Handling	P	MP
Joe Ingle	R&M Materials Handling	R&M Materials Handling	A	MP
Daniel Lynn Houser	Real Rigging Solutions, LLC	Real Rigging Solutions, LLC	P	U
Shawn Nolan	Reed Rigging, Inc.	Reed Rigging, Inc.	P	DR
Bruce Darden	Rigging Innovators, Inc.	Rigging Innovators, Inc.	P	CP
Bill Sapsis	Sapsis Rigging, Inc.	Sapsis Rigging, Inc.	P	U
Peter A. Scheu	Scheu Consulting Services	Scheu Consulting Services	P	G
Kimberly Corbett	Schuler Shook	Schuler Shook	P	G
Joshua Grossman	Schuler Shook	Schuler Shook	A	G
Dan Culhane	SECOA	SECOA	P	CP
Jerald Kraft	SECOA	SECOA	A	CP
Jean-Philippe Robitaille	Show Distribution Group, Inc.	Show Distribution Group, Inc.	P	DR
Knut Skjonberg	Skjonberg Controls, Inc.	Skjonberg Controls, Inc.	P	CP
Monica Skjonberg	Skjonberg Controls, Inc.	Skjonberg Controls, Inc.	A	CP
Mark Ager	Stage Technologies	Stage Technologies	P	CP
Nathan Wells	Stage Technologies	Stage Technologies	A	CP
Steve Walker	Steve A. Walker & Associates	Steve A. Walker & Associates	P	G
Richard J. Nix	Entertainment Structures Group	Steven Schaefer Associates	P	G
Kyle Kusmer	Entertainment Structures Group	Steven Schaefer Associates	A	G
Christine L. Kaiser	Syracuse Scenery & Stage Lighting Co., Inc.	Syracuse Scenery & Stage Lighting Co., Inc.	P	DR
Frank Willard	Syracuse Scenery & Stage Lighting Co., Inc.	Syracuse Scenery & Stage Lighting Co., Inc.	A	DR
Stephen G. Surratt	Texas Scenic Company	Texas Scenic Company	P	DR
Jerry Gorrell	Theatre Safety Programs	Theatre Safety Programs	P	G
Jeff Wilkowski	Thern, Inc.	Thern, Inc.	P	MP
Adrian Forbes-Black	Total Structures Inc.	Total Structures Inc.	P	MP
Elmer Veith	Total Structures - Eastern US Sales Office	Total Structures, Inc.	A	MP
Theresa Kelley	Total Structures Inc.	Total Structures Inc.	A	MP
Keith Bohn	Tomcat USA, Inc.	Vitec Group plc	P	MP

Name	Company	Representing (This is the sort field.)	Voting status	Int. cat.
Will Todd	Tomcat USA, Inc.	Vitec Group plc	A	MP
Joseph Champelli	ZFX Flying Inc.	ZFX Flying Inc.	P	DR
		Total	52	
			9	CP
			9	MP
		Subtotals by interest categories	10	DR
			10	U
			14	G

3 Approval of minutes from the previous meeting

See the draft minutes of the November meeting, RIGmin11-2009.pdf

Brad Dittmer moved that the draft minutes be approved as written. The motion was seconded. The motion was approved with a show of hands, with all voting in favor, except for three abstentions from people who were not present at the November meeting meeting.

4 ESTA declarations

4.1 Anti-trust statement

Bill Sapsis read the following statement aloud to the assembly:

"The ESTA Board of Directors, the Technical Standards Committee, and the leadership of this working group will reject or nullify any actions that unlawfully restrain trade. Anyone who feels that such an action is being or has been taken is requested to bring that matter to the attention of the chair immediately. Anyone who feels that actions in restraint of trade have been taken and not properly annulled is requested to notify the TSC chair or ESTA president immediately.

"ESTA legal counsel has informed us that violations of the anti-trust laws can have serious consequences. Individuals engaged in certain unlawful conduct can be found criminally liable. An individual convicted of a criminal violation of the Sherman Act may be fined as much as \$1,000,000 and imprisoned for up to ten years. An easy to read pamphlet describing restraint of trade issues is available from the Technical Standards Manager."

Karl Ruling, the Technical Standards Manager, held up one of the easy-to-read pamphlets to show that copies were available. He noted that the maximum penalty cited in the pamphlet is out of date, and less than what current law provides.

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

4.2 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 or copyright or other 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."

No patents or other protected intellectual property were announced to the group.

5 Approval of the agenda

Eddie Kramer moved that the draft agenda be accepted. The motion was seconded and then approved with a show of hands.

6 Old business

6.1 ANSI E1.1-2006, wire rope ladders revision

It's published. Any news or action needed?

Rocky Paulson said that at some time we should revise it for a higher weight limit. Two-hundred fifty pounds is a little light for workers now, and fall protection systems are now being made for higher loads.

Daniel Houser volunteered to work on revising the standard. Bill Sapsis said he would work on it with him.

6.2 ANSI E1.2-2006, Entertainment Technology - Design, Manufacture and Use of Aluminum Trusses and Towers

It's published. Any news or action needed?

Bill Sapsis noted that ANSI E1.2-2006 needs to be reviewed for reaffirmation, revision, or withdrawal. He proposed that it be discussed at the March meeting.

6.3 ANSI E1.4-2009, Entertainment Technology--Manual Counterweight Rigging Systems

No news or action.

6.4 BSR E1.6-1, Entertainment Technology--Powered Hoist Systems

Public review progress report.

Ruling reported that three reviewers had sent in comments so far.

There was a discussion of public review marketing and how to spread the word about the reviews. There was further discussion of marketing the standards so that workers in the field know about them.

The task group for BSR E1.6-1 was listed by Bill Sapsis:

- Harvey Sweet, TG leader
- Chris Kaiser, TG scribe
- Steve Walker
- Jim Niesel
- Pete Svitavsky
- Joe Champelli
- Kimberly Corbett
- Michael Lichter
- Jack Miller

6.5 BSR E1.6-2, Entertainment Technology--Design, Inspection, and Maintenance of Serially Manufactured Electric Chain Hoists for the Entertainment Industry

Public review progress report.

Ruling reported that he'd only received a public review response from one person so far.

The task group for E1.6-2 was listed by Bill Sapsis:

- Dan Culhane, TG leader
- Herb Hart
- Elmer Vieth
- Shawn Sack
- John Ringelman

Rick Montgomery

There was a discussion of removing "serially manufactured" from the title of the draft standard.

Rocky Paulson moved that we rename the document "Entertainment Technology--Design, Inspection, and Maintenance of Electric Chain Hoists for the Entertainment Industry." The motion was seconded and then approved with a show of hands, with all voters present voting in favor, except for three abstentions, making the vote 33 Yes, and three Abstain.

6.6 BSR E1.6-3, Selection and Use of Serially Manufactured Electric Chain Hoists in the Entertainment Industry

Kimberly Corbett moved that the names of E1.6-3 and E1.6-4 be changed to match the change made to the name of E1.6-2. The motion was seconded and then approved with a show of hands, with all voters present voting in favor, except for three abstentions, making the vote 33 Yes, and three Abstain.

The motion for public review was being decided with a recirculated letter ballot, which would close 4 February 2010. There was a discussion of the reasons submitted with the No votes, starting with Rick Montgomery's reasons.

Rick Montgomery restated his opposition, and said that his company would never sign-off on using their hoists for lifting people. Rocky Paulson defended the draft standard, and cited the OSHA regulations, which do not offer a blanket prohibition of lifting people with hoists. There was further discussion, which included the suggestion that flying people be removed from the scope. Harvey Sweet argued that risk assessment is the appropriate tool to figure out what to do. Mark Ager argued that lifting a load over people and lifting people have the same risk, so hoists used in either application should meet the same requirements.

William Gorlin's reasons were also discussed. He apologized for introducing the changes he would like to see in the document so late in the process. He started at the top of his list with determinant and indeterminant structures.

Martin Moore said that risk assessment should not be relied upon to ensure safety when loads are suspended over people. Double brakes and safeties have been used by Europeans for years in applications where loads are parked over people, and requiring these should be seriously considered for inclusion in our standards. Simply allowing someone to do a risk assessment to decide if these things are needed or not is too lax.

Gorlin's comments about who should be responsible for implementing load verification techniques were discussed.

There was further discussion of the definitions of "hoist user" and "very dangerous."

Gorlin also explained his concerns about the risk reduction techniques listed and dynamic loads.

Martin Moore than talked about his reasons, starting with his comment that anchorages need to be evaluated. Rocky Paulson said that this is outside the scope of the standard, and can be done in many different ways.

Moore reiterated his concern about parking and the need for dual brakes or redundant load supports ("safeties").

Moore then questioned the references and their function in the standard. Several people thought that the reference to B30.16 should be removed from this document.

Moore objected to the explanatory material being on the same page as the relevant clause. Rocky Paulson said that ASSE standards use this format, and he thinks they are the most clearly written standards and the format should be used in all ESTA standards.

Moore suggested that "LHL" is usually the stage, which he didn't find helpful, and suggested that "AUL," Area Under the Load, might work. Paulson argued that LHL is not always the stage and is not always under the load.

Moore said that the discussion at this meeting of areas of responsibility had helped clarify his concerns about them. He sees that the hoist user and the production rigger are not the same entity.

Moore suggested that language about when we are doing risk assessment and risk reduction should be clarified so we don't mix them up. Also, chapter 6 should properly be entitled Risk Assessment, not Hazard Assessment, and clause 7.1 "calculation" isn't a reduction it's an assessment and should be in 6. People seemed to agree with this.

He said that he would like to see the chart assigning values to risks that he offered written into the standard.

Moore again called for double brakes or redundant suspension. Rocky Paulson said that double brakes were not inserted because there was no evidence of any brake failures in the entertainment industry. Double brakes meet a prescriptive European standard, but the task group couldn't find any evidence that double brakes enhance reliability. It was noted that every chain hoist manufacturer serving this industry makes double-brake models that people can purchase, if they choose.

6.7 BSR E1.6-4, Control of Serially Manufactured Electric Chain Hoists in the Entertainment Industry

Progress report and any actions relevant to the BSR E1.6-4 project.

Peter Herrmann said the task group is meeting tomorrow (22 January), and the document is still a work in progress. He hopes to have a draft for the working group in March

6.8 ANSI E1.8-2005, Entertainment Technology--Loudspeaker Enclosures Intended for Overhead Suspension--Classification, Manufacture and Structural Testing

Ted Paget moved that we withdraw the standard. The motion was seconded and discussed. Ted Paget withdrew the motion.

Brad Ditmer moved that we start work to reaffirm E1.8. The motion was seconded. The motion was decided with a show of hands, with Chris Kaiser, Dan Houser, Ron Bonner, Kimberly Corbett, and Rick Montgomery voting to abstain, and the rest (31) voting in favor. The motion carried with a supermajority.

6.9 ANSI E1.15-2006, Entertainment Technology--Recommended Practices and Guidelines for the Assembly and Use of Theatrical Boom & Base Assemblies

No news or action was taken.

6.10 ANSI E1.21-2006, Temporary Ground-Supported Overhead Structures Used To Cover Stage Areas and Support Equipment in the Production of Outdoor Entertainment Events

No news or action.

6.11 ANSI E1.22 - 2009, Entertainment Technology - Fire Safety Curtain Systems

No news or action.

6.12 Arup fire modeling project progress report

Jim Neisel was not present to give a progress report, but he had sent an email containing the report earlier that morning. It had been forwarded to the working group, but few had had a chance to read it. Karl Ruling projected the email on the screen and read it aloud to the assembly:

So I was all prepared this time with a great animation of fire, sprinklers, hatch and fire safety curtain all working together in a sequence until I went down to see the engineers to make sure I could accurately describe what was happening and when. It turns out there were a couple problems with the model as it was run—the sprinkler activation temperature was set too low and the smoke hatch release was tied to the rate of rise detector for the fire safety curtain, not the more typical fusible link. So I can't show you the movie because the sequence just isn't accurate (yet), but it did point out a couple of interesting things:

1. The activation of the sprinklers lowers the temperature at the grid/ceiling by about 15-20 degrees Celsius (59-68 F) within 5 seconds of going off. The fire engineers tell me that the RTI of the sprinklers is faster than the smoke hatch, and if both the fusible link and the sprinklers have the same set point temperature, there is a high likelihood that the fusible link on the hatch will never be triggered -the sprinklers will have gone off first and lowered the temperature too low for its release. It would appear that a rate of rise detector is a better choice for the release mechanism for the hatch—maybe even the same ROR detector that the fire safety curtain is using.

2. The fire engineers tell me that you cannot rely on sprinklers to put out the fire. They said that the sprinklers can keep the fire from growing, and keep other things around it from bursting into flame(sort of the same thing I guess), but may or may not extinguish the fire, and sprinklers located 55 feet or more above a fire are ineffective at even that. So in a stagehouse with a grid over 55 feet high, unless you have a fire on the grid, or can raise the "flaming scenery" up closer to the under grid sprinklers, they won't be helping you control a fire.

3. The modeling of the "sealing" of the proscenium opening by the FSC is a difficult thing. The smoke pocket needs to be represented accurately in the model to ascertain how much make up air is getting to the fire on the stage. In theory, if the stage house had no air leaks and you quit adding in mechanical air, you could starve the fire of oxygen. However, you also introduce the potential for "backdraft" which would be bad. The model actually looks at how much smoke/air is creeping around the smoke pocket sides and out/in at the top of the FSC—which makes it very slow. Similar to rendering in the 1990s, these models take about 2 weeks to run in a "cluster" or "render farm" setup of multiple PCs running 24/7. It's not the "movies" that are generated, but the number crunching that takes so long.

So, bottom line—still working on it.

Kimberly Corbett said that Bill Conner, who was not present, had sent her an email with some comments on the Arup report and had asked her to share them with the working group. She did so, reading aloud from Conner's email to her:

In two actual fires on stages, sprinklers did suppress the fire: Peace Center in Greenville SC and Chicago Public Library.

Find a fire on a stage that is equipped with sprinklers where there was loss of life or even civilian injuries or even significant property loss. I can't find one.

If you look at the history of stage fires, all the notable ones—large loss of life—originated in the scenery in the flies above the lights and well under the 50' range of sprinklers. You don't have to raise it, the burning scenery is already there, at or above the most common ignition source.

No one has proved sprinklers are not effective at elevations greater than 50 or 55', but no one has proved they are.

ESFR (Early Suppression Fast Response) sprinklers do put fires out.

There were no motions offered or action taken on the Arup report; it was strictly informational.

6.13 BSR E1.38 - 20xx, Temporary Ground-Supported Structures Used to Support Equipment in the Production of Outdoor Entertainment Events, Excluding Stage Roofs

Keith Bohn said the task group has a meeting tonight and is also discussing possibly expanding E1.21 to include these structures.

There was a discussion of making it for indoor structures, too.

Rocky Paulson suggested omitting the use of the word "temporary" and using the term "portable" to describe these structures to avoid problems with jurisdictions that have conflicting regulations about "temporary" structures.

Bill Sapsis read off the list of the task group membership:

- Keith Bohn, TG leader
- Adrian Forbes-Black
- Bill Gorlin
- David Campbell
- Richard Nix
- Tim Franklin
- Michael Reed
- Greg Hareld
- Mike Garl

6.14 BSR E1.39 - 20xx, Entertainment Technology – Recommendations for the Use of Fall Protection on Portable Suspended and Ground-Supported Structures

Progress report. See the draft BSRE1-39_0911-2.pdf.

Rocky Paulson said that the document is now about "portable" rather than "temporary" structures.

There was discussion of "single-purpose structure," "worker," "supervisor," "employer," and "employee" as a result of some comments from Eddie Kramer. Kramer felt that these terms need to be carefully considered and defined.

Bill Sapsis read the list of task group members:

- Rocky Paulson, TG leader
- Shawn Nolan
- Will Todd
- Mike Wells
- Wendy Holt
- Ethan Gilson
- Tray Allen

6.15 Uncrowding the Rigging Working Group meetings

Sapsis said tha he received many comments on the idea of somehow making the assembly at a meeting smaller, bt all save one ultimately said to keep the working group the same.

Mark Ager suggested using video conferencing for the meetings. People could participate without having to travel long distances for the meeting and would not take up space in the room. Those not attending in person could be charged for the expense of running the video conferencing system. It probably would be less than the cost of traveling to attend a meeting in person, so they shouldn't object.

Bill Sapsis said he and Eddie Kramer will research video conferencing systems.

7 New business

8 Other business and announcements

Karl Ruling said that the new P&P has a new interest category: designer. He will send voting members a form with which they can opt to be in this interest category.

There was no other business or announcements.

9 Schedule for future meetings

Sapsis announced that the next meeting is scheduled to be at the Marriott Kansas City Downtown in Kansas City, MO on Tuesday 30 March 2010, from 18:00 to 22:00.

10 Adjournment

Ted Paget moved that the meeting adjourn. The motion was seconded. Hearing no objections, Bill Sapsis declared the meeting adjourned at 16:56.

Working Group Membership and Contact Information as of 10 February 2010

Name	Company	Representing (Sort field)	Voting status	Int. cat.
Woody Pyeatt	A V Pro, Inc.	A V Pro, Inc.	P	DR
Baer Long	Ninja Rigging	Act 1 Rigging Inc.	O	G
Ethan William Gilson	ALPS	Advanced Lighting and Production Services	P	U
William Bradburn	Aerial Arts, Inc.	Aerial Arts, Inc.	P	U
Michael G. Wiener	Aerial Rigging & Leasing, Inc.	Aerial Rigging & Leasing, Inc.	O	U
Andy Sutton	AFX UK Ltd.	AFX UK Ltd.	O	U
Wendy Holt	AMPTP/CSATF	Alliance of Motion Picture and Television Producers	P	G
William Conner	Bill Conner Associates LLC	Amer. Society of Theatre Consultants	P	U
R. Duane Wilson	George C. Izenour Associates	Amer. Society of Theatre Consultants	A	U
Jim Fletcher	American Sling Company, Inc.	American Sling Company, Inc.	O	MP
André Broucke	André Broucke	André Broucke	O	G
John "Andrew" Munro	animaenagerie	animaenagerie	O	U
Jon Lenard	Applied Electronics	Applied Electronics	P	MP
James Niesel	Arup	Arup	P	G
Dennis J. Lopez	Automatic Devices Co.	Automatic Devices Co.	O	MP
Donald A. Hoffend, Jr.	Avista Designs, LLC	Avista Designs, LLC	P	G
Jiantong Wu	Beijing Special Engineering Design & Research Institute	Beijing Special Engineering Design & Research Institute	O	G
Buddy Braile	Bestek Lighting & Staging	Bestek Lighting & Staging	O	U
Lee J. Bloch	Bloch Design Group, Inc.	Bloch Design Group, Inc.	O	G
Joachim Stoecker	CAMCO GmbH	CAMCO GmbH	O	MP
Charlie Weiner	Charlie Weiner	Charlie Weiner	P	U
Ted Jones	Chicago Spotlight, Inc.	Chicago Spotlight, Inc.	O	U
Daniel J. Clark	Clark-Reder Engineering, Inc.	Clark-Reder Engineering, Inc.	O	G
Herb Hart	Columbus McKinnon Corp.	Columbus McKinnon Corp.	P	MP

Mylan Lester	Creation Logics Ltd.	Creation Logics Ltd.	O	U
Howard R. Ott	D.E.O. Associates, Inc.	D.E.O. Associates, Inc.	O	G
Edward A. (Ted) Paget	Vortek Rigging Division	Daktronics Inc.	P	CP
Pat Grenfell	Vortek	Daktronics Inc.	A	CP
Wes Jenkins	Down Stage Right Industries	Down Stage Right Industries	O	CP
M. Brad Dittmer	Downhome Productions	Downhome Productions	P	U
Noga Eilon-Bahar	Eilon Engineering Industrial Weighing Systems	Eilon Engineering Industrial Weighing Systems	O	MP
Harvey Sweet	Electronic Theatre Controls, Inc.	Electronic Theatre Controls, Inc.	P	MP
Michael Lichter	Electronic Theatre Controls, Inc.	Electronic Theatre Controls, Inc.	A	MP
F. Robert Bauer	F.R. Bauer & Associates, LLC	F.R. Bauer & Associates, LLC	O	G
Cristina Delboni	Feeling Structures	Feeling Structures	O	MP
Dana Bartholomew	Fisher Technical Services, Inc.	Fisher Technical Services, Inc.	P	CP
Ben Hayes	Freedom Flying	Freedom Flying	O	G
Rocky Paulson	Stage Rigging, Inc.	Freeman Companies	P	DR
Dean Hart	Stage Rigging, Inc.	Freeman Companies	O	U
John Ringelman	Stage Rigging, Inc.	Freeman Companies	A	DR
Miriam Paschetto	Geiger Engineers	Geiger Engineers	P	G
David M. Campbell	Geiger Engineers	Geiger Engineers	O	G
Timothy Mills	Geiger Engineers	Geiger Engineers	O	G
Reid Neslage	H & H Specialties Inc.	H & H Specialties Inc.	P	MP
Delbert Hall	Hall Associates Inc.	Hall Associates Inc.	O	U
Ed Garstkiewicz	Harting Inc., North America	Harting KGAA	P	G
Howard Forryan	Harting Ltd.	Harting KGAA	O	MP
Jody Williquette	Harting Inc., North America	Harting KGAA	A	G
Peter "Punch" Christian Schmidtke	Hollywood Lighting Services, Inc.	Hollywood Lighting, Inc.	O	DR
Edwin S. Kramer	I.A.T.S.E. Local 1	I.A.T.S.E. Local 1	P	U
G. Anthony Phillips	I.A.T.S.E. Local 16	I.A.T.S.E. Local 16	O	U

Gregory C. Collis	I.A.T.S.E. Local 16	I.A.T.S.E. Local 16	O	G
Roger Lattin	I.A.T.S.E. Local 728	I.A.T.S.E. Local 728	P	U
Michael Dileso	IATSE Local 481	IATSE Local 481	O	U
Kent H. Jorgensen	IATSE Local 80	IATSE Local 80	O	G
Peter V. Svitavsky	J.R. Clancy Inc.	J. R. Clancy Inc.	P	CP
Rodney F. Kaiser	J.R. Clancy Inc.	J.R. Clancy, Inc.	A	CP
Thomas S. Young	J.R. Clancy Inc.	J.R. Clancy, Inc.	A	CP
Mike Garl	James Thomas Engineering, Inc.	James Thomas Engineering, Inc.	P	MP
Tray Allen	James Thomas Engineering, Inc.	James Thomas Engineering, Inc.	A	MP
Jay O. Glerum	Jay O. Glerum & Associates, Inc.	Jay O. Glerum & Associates, Inc.	O	U
Chuck McClelland	Jeamar Winches Inc.	Jeamar Winches Inc.	O	MP
John Kaes	John Kaes	John Kaes	O	U
John R. Burgess	John R. Burgess	John R. Burgess	O	U
Gary Mardling	Kish Rigging	Kish Rigging	O	DR
Greg Herald	Kleege Industries	Kleege Industries	P	U
Nevin Kleege	Kleege Industries	Kleege Industries	O	U
Mark Riddlesperger	LA ProPoint, Inc.	LA ProPoint, Inc.	O	CP
Katherine Tharp	LA ProPoint, Inc.	LA ProPoint, Inc.	O	CP
William Beautyman	Limelight Productions, Inc.	Limelight Productions, Inc.	P	DR
Bob Medve	Limelight Productions, Inc.	Limelight Productions, Inc.	A	DR
Louis Bradfield	Louis Bradfield	Louis Bradfield	O	U
William B. Gorlin	McLaren Engineering Group	M.G. McLaren, P.C.	P	G
Martin Moore	Martin Moore	Martin Moore	I	G
Michael L. Savage, Sr.	Middle Dept. Inspection Agency, Inc.	Middle Dept. Inspection Agency, Inc.	O	G
Michael J. Carnaby	Mikan Theatricals	Mikan Theatricals	O	DR
Todd Petersen	Mixed Productions	Mixed Productions	O	U
Vincent J. Cannavale	Motion Laboratories	Motion Laboratories	P	CP

Peter Herrmann	Motion Laboratories	Motion Laboratories	A	CP
David Herrmann	Motion Laboratories	Motion Laboratories	A	CP
Shawn Sack	Mountain Productions Inc.	Mountain Productions Inc.	P	DR
James B. Evans	Mountain Productions Inc.	Mountain Productions Inc.	O	DR
Donald Halchak	Mountain Productions Inc.	Mountain Productions Inc.	A	DR
Bradford A. Kegel	National Production Services Inc.	National Production Services Inc.	O	U
François Deffarges	Nexo	Nexo	O	MP
Tracy Nunnally	Northern Illinois University	Northern Illinois University	O	U
Ted Hickey	OAP Audio Products	OAP Audio Products	O	MP
Tim Hansen	Oasis Stage Werks	Oasis Stage Werks	P	DR
Gary Justesen	Oasis Stage Werks	Oasis Stage Werks	O	DR
Spencer Brown	Oasis Stage Werks	Oasis Stage Werks	A	DR
Bob Murphy	Occams Razor Technical Services	Occams Razor Technical Services	O	G
Robert A. Grenier Jr.	Ocean State Rigging Systems Inc.	Ocean State Rigging Systems Inc.	O	DR
Ron Bonner	PLASA	PLASA	P	G
Michael Patterson	Pook Diemont & Ohl, Inc.	Pook Diemont & Ohl, Inc.	O	CP
John (Jack) Miller	Scenic Technologies	Production Resource Group	P	CP
Marc Hendriks	Prolyte	Prolyte	O	MP
Douglas Franz	QVC Network	QVC Network	O	U
Rick Montgomery	R&M Materials Handling	R&M Materials Handling	P	MP
Joe Ingle	R&M Materials Handling	R&M Materials Handling	A	MP
Scott Mohr	R&R Cases and Cabinets	R&R Cases and Cabinets	O	G
Daniel Lynn Houser	Real Rigging Solutions, LLC	Real Rigging Solutions, LLC	P	U
Shawn Nolan	Reed Rigging, Inc.	Reed Rigging, Inc.	P	DR
Michael Reed	Reed Rigging, Inc.	Reed Rigging, Inc.	O	DR
Rinus Bakker	Rhino Rigs B.V.	Rhino Rigs B.V.	O	G
Bruce Darden	Rigging Innovators, Inc.	Rigging Innovators, Inc.	P	CP

Rikki Newman	Rikki Newman	Rikki Newman	O	U
Randall W. A. Davidson	Risk International & Associates, Inc.	Risk International & Associates, Inc.	O	U
Roy Bickel	Roy Bickel	Roy Bickel	O	G
Thomas M. Granucci	Associated Students, Cox Arena	San Diego State University	O	U
Bill Sapsis	Sapsis Rigging, Inc.	Sapsis Rigging, Inc.	P	U
Peter A. Scheu	Scheu Consulting Services	Scheu Consulting Services	P	G
Kimberly Corbett	Schuler Shook	Schuler Shook	P	G
Joshua Grossman	Schuler Shook	Schuler Shook	A	G
Dan Culhane	SECOA	SECOA	P	CP
Jerald Kraft	SECOA	SECOA	A	CP
Shaun Millington	SEW-Eurodrive, Inc.	SEW-Eurodrive, Inc.	O	MP
Rob Stevenson	SEW-Eurodrive, Inc.	SEW-Eurodrive, Inc.	O	MP
Jean-Philippe Robitaille	Show Distribution Group, Inc.	Show Distribution Group, Inc.	P	DR
Knut Skjonberg	Skjonberg Controls, Inc.	Skjonberg Controls, Inc.	P	CP
Monica Skjonberg	Skjonberg Controls, Inc.	Skjonberg Controls, Inc.	A	CP
Robert Barbagallo	Solotech Inc.	Solotech Inc.	O	DR
Jon Lagerquist	South Coast Repertory	South Coast Repertory	O	U
Mark Ager	Stage Technologies	Stage Technologies	P	CP
Nathan Wells	Stage Technologies	Stage Technologies	A	CP
Olan Cottrill	Staging Productions, Inc.	Staging Productions, Inc.	O	DR
Roger Barrett	Star Events Group Ltd.	Star Events Group Ltd.	O	DR
Steve Walker	Steve A. Walker & Associates	Steve A. Walker & Associates	P	G
Richard J. Nix	Entertainment Structures Group	Steven Schaefer Associates	P	G
Kyle Kusmer	Entertainment Structures Group	Steven Schaefer Associates	A	G
Christine L. Kaiser	Syracuse Scenery & Stage Lighting Co., Inc.	Syracuse Scenery & Stage Lighting Co., Inc.	P	DR
Frank Willard	Syracuse Scenery & Stage Lighting Co., Inc.	Syracuse Scenery & Stage Lighting Co., Inc.	A	DR
Reuben Goldberg	Technic Services	Technic Services	O	U

Stephen G. Surratt	Texas Scenic Company	Texas Scenic Company	P	DR
Richard C. Mecke	Texas Scenic Company	Texas Scenic Company	O	DR
Eugene Leiternann	Theatre Projects Consultants, Inc.	Theatre Projects Consultants, Inc.	O	G
Jerry Gorrell	Theatre Safety Programs	Theatre Safety Programs	P	G
Ed Nicholas	Theatrical Lighting Systems, Inc.	Theatrical Lighting Systems, Inc.	O	DR
John Van Lennep	Theatrix Inc.	Theatrix Inc.	O	DR
John C. Snook	Thermotex Industries Inc.	Thermotex Industries Inc.	O	CP
Jeff Wilkowski	Thern, Inc.	Thern, Inc.	P	MP
Tim Franklin	Theta-Consulting	Theta-Consulting	O	G
Chris Higgs	Total Solutions Group	Total Solutions Group	O	G
Adrian Forbes-Black	Total Structures Inc.	Total Structures Inc.	P	MP
Ian Coles	Total Structures, Inc.	Total Structures, Inc.	O	MP
Peter Johns	Total Structures, Inc.	Total Structures, Inc.	O	MP
Elmer Veith	Total Structures - Eastern US Sales Office	Total Structures, Inc.	A	MP
Theresa Kelley	Total Structures Inc.	Total Structures Inc.	A	MP
JoAnna Kamorin-Lloyd	Vincent Lighting Systems	Vincent Lighting Systems	O	U
Michael Keppler	Bogen	Vitec Group	O	MP
Keith Bohn	Tomcat USA, Inc.	Vitec Group plc	P	MP
Will Todd	Tomcat USA, Inc.	Vitec Group plc	A	MP
Hank Miller	W.E. Palmer Co.	W.E. Palmer Co.	O	CP
Rand Goddard	W.E. Palmer Co.	W.E. Palmer Co.	O	CP
Pete Happe	Walt Disney Imagineering	Walt Disney Company	O	U
Warren A. Bacon	Warren A. Bacon	Warren A. Bacon	O	U
Michael Wells	Xtreme Structures & Fabrication	Xtreme Structures & Fabrication	O	CP
Joseph Champelli	ZFX Flying Inc.	ZFX Flying Inc.	P	DR
Robert Dean	ZFX Flying Inc.	ZFX Flying Inc.	O	DR

Voting status

- P principal
- A alternate
- I individual voting member
- O observer, non-voting

Interest categories

- CP custom-market producer
- MP mass-market producer
- DR dealer or rental company
- U user
- G general interest