

Minutes
Rigging Working Group
Tues, 30 March 2010
Marriott Kansas City Downtown
Kansas City, MO

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
Wendy Holt; AMPTP/CSATF, representing AMPTP; P; G
William Conner; Bill Conner Associates LLC, representing ASTC; P; DE
James Niesel; Arup; P; G
Donald Hoffend, III; Avista Designs, LLC; A; G
Daniel J. Clark; Clark-Reder Engineering, Inc.; O (status changed to P at end of meeting); G
Herb Hart; Columbus McKinnon Corp.; P; MP
Shawn Sack; Columbus McKinnon Corp.; A; MP
Bill Waters; Conductix-Wampfler; O; MP
Edward A. (Ted) Paget; Vortek Rigging Division (Daktronics Inc.); P; CP
Dan Lisowski; Dept. Of Theatre and Drama (University of Wisconsin - Madison; P; U
M. Brad Dittmer; Downhome Productions; P; U
Harvey Sweet; Electronic Theatre Controls, Inc.; P; MP
Michael Lichter; Electronic Theatre Controls, Inc.; A; MP
Rocky Paulson; Stage Rigging, Inc. (Freeman Companies); P; DR
Miriam Paschetto; Geiger Engineers; P; G
Reid Neslage; H & H Specialties Inc.; P; MP
Edwin S. Kramer; I.A.T.S.E. Local 1; P; U
Roger Lattin; I.A.T.S.E. Local 728; P; U
Kent H. Jorgensen; IATSE Local 80; O; G
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
William Beautyman; Limelight Productions, Inc.; P; DR
Bob Medve; Limelight Productions, Inc.; A; DR
William B. Gorlin; McLaren Engineering Group (M.G. McLaren, P.C.); P; G
Martin Moore; I; G (arrived at 19:20)
Peter Herrmann; Motion Laboratories; A; CP
Donald Halchak; Mountain Productions Inc.; P; DR
Marty Wesstrom; Mountain Productions Inc.; A; DR
Tim Hansen; Oasis Stage Werks; P; DR
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
Michael Reed; Reed Rigging, Inc.; O; DR
Bruce Darden; Rigging Innovators, Inc.; P; CP
Kimberly Corbett; Schuler Shook; P; G
Dan Culhane; SECOA; P; CP
Jean-Philippe Robitaille; Show Distribution Group, Inc.; P; DR
Knut Skjonberg; Skjonberg Controls, Inc.; P; CP
Monica Skjonberg; Skjonberg Controls, Inc.; A; CP

Steve Walker; Steve A. Walker & Associates; P; G
Richard J. Nix; Entertainment Structures Group (Steven Schaefer Associates); P; G
Christine L. Kaiser; Syracuse Scenery & Stage Lighting Co., Inc.; P; DR
Stephen G. Surratt; Texas Scenic Company; P; DR
Jerry Gorrell; Theatre Safety Programs; P; G
John C. Snook; Thermotex Industries Inc.; O; CP
Elmer Veith; Total Structures, Inc.; A; MP
Keith Bohn; Tomcat USA, Inc. (Vitec Group plc); P; MP
Will Todd; Tomcat USA, Inc. (Vitec Group plc); A; MP
Pete Happe; Walt Disney Imagineering (Walt Disney Company); O; U
Michael Wells; Xtreme Structures & Fabrication; O; CP
Stu Cox; ZFX Flying Inc.; A; CP

Visitors:

Joel Guerra; Texas Scenic Company
Sebastien Truchon; Show Distribution Group

1 Opening remarks

Bill Sapsis called the meeting to order at 18:03. He thanked all present for being at the meeting.

2 Attendance and membership

2.1 Introduction of those present

Those present introduced themselves, proceeding clockwise around the big table, starting at Bill Sapsis's left.

2.2 Circulation of attendance sign-in sheet

A chartreuse sign-in sheet was circulated.

2.3 Call for quorum

Sapsis asked for a show of hands of voters. He counted them and then announced that a quorum was present.

2.4 Requirements for membership

Sapsis reminded the assembly that membership is open to all who are materially affected by the work of the group. People who would be in the designer interest group category 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 would be moved to observer status if they miss this one:

Donald A. Hoffend, Jr.; Avista Designs, LLC
Peter A. Scheu; Scheu Consulting Services

An application was pending for an alternate voting member for Avista, so as soon as that application was processed, Avista would have a representative present. Therefore, no change was made to Avista Designs's voting status.

Scheu Consulting Services had no representative at the meeting, so was moved to observer status.

2.6 Processing of new membership requests

The following membership applications had been received:

Dan Lisowski; University of Wisconsin, Madison; principal; U

Aleksandrs Lupinskis; Real Rigging Solutions, LLC; alternate; U
 Donald Hoffend III; Avista Designs; alternate; G
 Marty Wesstrom, Mountain Productions, alternate; DR
 Shawn Sack; Columbus McKinnon; alternate; MP
 Stu Cox; ZFX Flying Inc.; alternate; CP

Ted Paget moved that the applications be accepted. The motion was seconded and then approved with a show of hands.

2.7 Consensus body

The full consensus body during this meeting was:

Name	Company	Representing	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	DE
R. Duane Wilson	George C. Izenour Associates	Amer. Society of Theatre Consultants	A	DE
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
Donald Hoffend, III	Avista Designs, LLC	Avista Designs, LLC	A	G
Charlie Weiner	Charlie Weiner	Charlie Weiner	P	U
Herb Hart	Columbus McKinnon Corp.	Columbus McKinnon Corp.	P	MP
Shawn Sack	Columbus McKinnon Corp.	Columbus McKinnon Corp.	A	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

Name	Company	Representing	Voting status	Int. cat.
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
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
Donald Halchak	Mountain Productions Inc.	Mountain Productions Inc.	P	DR
Marty Wesstrom	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
Aleksandrs Lupinskis	Real Rigging Solutions, LLC	Real Rigging Solutions, LLC	A	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
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

Name	Company	Representing	Voting status	Int. cat.
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
Dan Lisowski	Dept. Of Theatre and Drama	University of Wisconsin - Madison	P	U
Keith Bohn	Tomcat USA, Inc.	Vitec Group plc	P	MP
Will Todd	Tomcat USA, Inc.	Vitec Group plc	A	MP
Joseph Champelli	ZFX Flying Inc.	ZFX Flying Inc.	P	CP
Stu Cox	ZFX Flying Inc.	ZFX Flying Inc.	A	CP
		Total	51	
			10	CP
			9	MP
			9	DR
		Subtotals by interest categories	10	U
			12	G
			1	DE

3 Approval of minutes from the previous meeting

Eddie Kramer moved that the draft minutes of the January 2010 meeting (file name RIGmin01-2010.pdf) be approved as written. The motion was seconded and then approved with a show of hands.

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."

Technical Standards Manager, Karl Ruling, held up one of the easy-to-read pamphlets to show that copies were available at the meeting.

No restraint of trade issue was 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 protected intellectual property was brought to the attention of the assembly.

5 Approval of the agenda

Items were added under "Other business":

- The PLASA/ESTA merger
- PLASA International Rigging Conference
- International Theatre Engineering and Architecture Conference in the UK
- Martin Moore's Saturday USITT session, "Fast Tracking Rigging Standards"

Wendy Holt moved that the draft agenda with these additions be accepted. The motion was approved with a show of hands.

6 Old business

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

Report on proposed changes pending reaffirmation. Dan Houser, Rocky Paulson, Bill Sapsis

Dan Houser moved that the existing ANSI E1.1 standard be revised. The motion was seconded. There was discussion of the work that the task group had done to suggest possible needed changes. The motion was approved by a unanimous show of hands, which was a supermajority of the consensus body. There was no opposition.

The task group said that a draft document would be ready by July.

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

Discussion on reaffirmation.

Richard Nix moved that we reaffirm ANSI E1.2-2006. The motion was seconded. The motion was approved by a unanimous show of hands, which was a supermajority of the consensus body. There was no opposition.

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

Comment resolutions progress report and discussion. See comment summary document, E1-6-1ScndPblRevwSmmry.pdf

There was discussion of the task group's questions about resolving comments found in RWGE1-6-1discussn30Mar2010.pdf.

6.4.1 Discussion topic: Definition of "area(s) of public assembly"

In this review, and others within the past several years, a public review comment has suggested that "area(s) of public assembly" does not adequately identify the place or places where Rigging Working Group standards are used. Does the Rigging Working Group have suggestions as to how these comments can be responded to?

This question was in regard to public review comments 6 and 7.

There was discussion in which it was suggested that places in which the equipment within the scope of this standard is used are places that are for "for performance, presentation, and theatrical production." Tim Hansen moved that that shall be the response for comments 6 and 7. The motion was seconded, and then approved with a show of hands, with one abstention and the other votes in favor.

Chris Kaiser moved that the Rigging Working Group shall direct the task group to reject both comments 6 and 7 and develop some appropriate wording to address the issue. The motion was seconded and then approved with a show of hands.

6.4.2 Discussion topic: Style

ANSI style requirements are often commented upon in public reviews. Is the Rigging Working Group totally responsible for achieving all ANSI style requirements, following the TSP style manual only, and are documents coming from the Rigging Working Group reviewed by Karl and/or others for proper ANSI style. How should such comments be responded to?

This question was particularly in regard to public review comment 340.

Chris Kaiser moved that the response to comment 340 shall be "Accept in principal. There is no specific request being made, but we will work hard to meet the intent of the comment." The motion was seconded and then approved with a show of hands.

6.4.3 Discussion topic: Hoist vs winch

The E1.6-1 task group has elected to use the word "hoist" to refer to the mechanical device that raises and lowers objects. To some the words are interchangeable. To others there is a specific definition of each word.

This question was in regard to public review comment 29.

Harvey Sweet moved that the resolution to 29 shall be "Reject." The motion was seconded. There was discussion. The motion was approved with a show of hands.

6.4.4 Discussion topic: Relationship of E1.6-1 and E1.4

Should the Rigging Working Group ensure that E1.5-1 and E1.4 do not conflict? If so, should conflicts not exist in technical details only, or also in style? Should later Rigging Working Group documents ensure that portions of previously issued standards are not repeated?

This question was in regard to public review comments 111 and 114 that note different permissible D:d ratios in the two documents.

Tim Hansen moved that in regard to the D:d, drum to wire rope diameter ratio, the response to comment 11 shall be "Accept in principal. Change clause 6.2.4.3 to say, "Refer to wire rope manufacturer's recommendations." The motion was seconded and approved with a show of hands.

6.4.5 Citing E1.4

Harvey Sweet moved that we reject the suggestion in comment 155 that we cite ANSI E1.4 clauses in E1.6. The motion was seconded and approved with a show of hands.

6.4.6 Discussion topic: Broadway equipment

Should the Rigging Working Group consider specialized Broadway or other production equipment uses within this standard?

Public review comment 94 was discussed. The comment suggested that clauses in E1.6 should specify whether or not their requirements apply to Broadway production equipment. Harvey Sweet moved that we reject the comment. The motion was seconded and approved with a show of hands.

Public review comment 185 was related to Broadway equipment also, and suggested that the requirements of other clauses in E1.6 required features that Broadway equipment doesn't have and would be difficult to implement. The comment was discussed. Harvey Sweet moved that the comment be rejected. The motion was seconded and approved with a show of hands.

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

Comment resolution progress report and discussion. See comment summary document E1-6-2SxthCmmntsSmmry.pdf

6.5.1 Restating requirements

There was a discussion of Martin Moore's objection to restating requirements that can be found in other standards. Is it a good idea to simply reference requirements in other standards, so people need to read those standards to find out what the requirements are of this one, or should we state the requirements that are important for E1.6-2 in E1.6-2 even if identical requirements can be found in standards for chain hoists that are not within the scope of this standard?

Jim Niesel moved that in response to Martin Moore's comment, the Rigging Working Group direct the task group to remove all explicit references to B30.16 and to restate the requirements that are appropriate to E1.6-2. The motion was seconded and approved with a show of hands.

6.5.2 Defining hoists within the scope

Richard Nix's 0.0 comment was discussed, and it was decided that his comment on 2.11 helps clarify what he meant.

Dan Houser moved that Nix's definition in 2.11 be accepted in principal, to read: "*Serially Manufactured: Indicating a specific manufacturing process in which the same facilities and procedures are used to produce a series of identical products for general use, each containing unique, permanently applied sequential alphanumeric identification marks, all of which are permanently recorded by the manufacturer for traceability, and for which the manufacturer's established operational design criteria and quality assurance procedures for any single unit are equally applicable to all other units of the series.*"

The motion was seconded and approved with a show of hands.

6.6 BSR E1.6-3, Safe Use of Electric Chain Hoists in the Entertainment Industry

Report on TSC public review vote and public review.

Karl Ruling reported that it is available for public review. He urged that people direct interested parties to the ESTA website to get the whole review packet rather than simply sending them the draft standard. The

review packet includes a response form and some information about what to look for and how to respond, which is important.

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

Progress report and any actions relevant to the BSR E1.6-4 project. See E1-6-4_2010-2008.pdf.

Peter Herrmann asked for comments from the working group to be sent to him by April 30th.

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

Report on TSC reaffirmation vote and moving forward.

Ruling reported that the reaffirmation project had been approved by the TSC.

Eddie Kramer moved that the existing document be offered for public review. The motion was seconded. A first public review needs to be decided by letter ballot. A show of hands was offered in support of the issuance of the letter ballot.

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

Discussion on reaffirmation.

Richard Nix moved we reaffirm the existing ANSI E1.15. The motion was seconded. The motion was approved with a show of hands, with three abstentions, and all the rest voting in favor, which was a supermajority of the consensus body.

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

Discussion on incorporating BSR E1.38-20XX into this standard or vice versa.

Keith Bohn said that the task group looked at the documents and decided that the two projects should be combined. Bohn moved that the two projects shall be combined. The motion was seconded. The motion was approved with a show of hands, with three abstentions and the rest voting in favor. This was a supermajority of the consensus body.

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 Niesel presented a progress report, complete with animated simulations, showing further work on the fire modeling project.

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

Action on E1.38 was covered in minutes item 6.10.

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

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

There was a discussion of the progress on E1.39. Rocky Paulson asked for comments from the working group by May 15.

7 New business

None.

8 Other business and announcements

8.1 Video conferencing

Eddie Kramer and Bill Sapsis gave their report on video conferencing available that would allow participation in RWG meetings without physical attendance. Sapsis said that they hadn't found anything available that works for us. The number of participants is limited, the interaction is limited, or it requires people assembling at a special teleconference facility, which reduces the advantages of teleconferencing over simply going to a meeting.

Dan Culhane suggested using Second Life. Second Life can be used for on-line role-playing for entertainment, but it also can be used to create virtual workplaces where people can virtually meet, hold events, practice corporate communications, simulate business processes, and prototype new products.

8.2 LDI Sessions

Possible LDI sessions were discussed.

PFAS session lead by Rocky Paulson. Participant: Mike Wells, Rocky Paulson, Wendy Holt, Ethan Gilson, Shawn Nolan.

Fire safety curtain systems: What happens in a theatre fire? Or, what do we think happens? Jim Niesel, Harvey Sweet, Dan Culhane.

8.3 PLASA/ESTA merger

Bill Sapsis urged people to vote on the merger. At least 51% of the ESTA membership in each category needs to vote for the election to be valid. There will be an informational session at this conference for ESTA members to explain the benefits and ramifications of the proposed merger.

8.4 PLASA International Rigging Conference

Sapsis announce that the PLASA rigging conference will run concurrent with the PLASA trade show at The Earls Court. Information is available at <http://www.plasariggingconference.com>. There is a discount on the registration fee for ESTA and PLASA members.

8.5 International Theatre Engineering and Architecture Conference

Sapsis announced that the next TEAC will be in London, UK from Sunday the 13th through Tuesday 15th of June 2010. A TEAC event will be held every two years, with Richard Brett and Bill Sapsis alternating in organizing them in the UK and North America.

8.6 "Fast Tracking Rigging Standards" USITT session

In response to all questions about the content, purpose, and participants in the session, Martin Moore said, "Come to the session."

8.7 Late changes in voting status

Daniel Clark asked to be moved from observer status to principal voting status. This was so moved by Ted Paget. The motion was seconded and then approved with a show of hands.

9 Schedule for future meetings

Sapsis announced that the next working group meeting is scheduled for Thursday, 22 July 2010, from 13:00 to 18:00, at the Marriott Solana in Westlake, TX.

10 Adjournment

Kevin Bohn moved that the meeting adjourn. The motion was seconded. Hearing no objections, Bill Sapsis declared the meeting adjourned at 21:54.

Membership and Contact Information as of 20 May 2010

Name	Company	Representing (This is the primary 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	DE
R. Duane Wilson	George C. Izenour Associates	Amer. Society of Theatre Consultants	A	DE
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
Donald Hoffend_III	Avista Designs, LLC	Avista Designs, LLC	A	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

Name	Company	Representing (This is the primary sort field.)	Voting status	Int. cat.
Daniel J. Clark	Clark-Reder Engineering, Inc.	Clark-Reder Engineering, Inc.	P	G
Herb Hart	Columbus McKinnon Corp.	Columbus McKinnon Corp.	P	MP
Shawn Sack	Columbus McKinnon Corp.	Columbus McKinnon Corp.	A	MP
Bill Waters	Conductix-Wampfler	Conductix-Wampfler	O	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

Name	Company	Representing (This is the primary sort field.)	Voting status	Int. cat.
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 Dileo	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

Name	Company	Representing (This is the primary sort field.)	Voting status	Int. cat.
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
Donald Halchak	Mountain Productions Inc.	Mountain Productions Inc.	P	DR
James B. Evans	Mountain Productions Inc.	Mountain Productions Inc.	O	DR
Marty Wesstrom	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

Name	Company	Representing (This is the primary sort field.)	Voting status	Int. cat.
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
Aleksandrs Lupinskis	Real Rigging Solutions, LLC	Real Rigging Solutions, LLC	A	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	O	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

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Mark Ager	Stage Technologies	Stage Technologies	P	CP
Nathan Wells	Stage Technologies	Stage Technologies	A	CP
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 Leitermann	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
Dan Lisowski	Dept. Of Theatre and Drama	University of Wisconsin - Madison	P	U
JoAnna Kamorin-Lloyd	Vincent Lighting Systems	Vincent Lighting Systems	O	U

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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	CP
Robert Dean	ZFX Flying Inc.	ZFX Flying Inc.	O	DR
Stu Cox	ZFX Flying Inc.	ZFX Flying Inc.	A	CP

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
- DE designer