

Minutes
RIGGING WORKING GROUP

November 11, 1998

Hyatt Hotel

Phoenix, AZ

Chairman: Mike Garl; James Thomas Engineering, Inc.; Principal; Producer

Recording secretary: Karl G. Ruling, ESTA

Members in attendance: Steve Butner; Aerial Rigging & Leasing, Inc.; Principal; Producer
Brad Dittmer; Associated Theatrical Contractors; Principal; User
Eric Todd; BML Inc.; Principal; Producer
Joachim Stoecker; CAMCO GmbH; Observer; Producer
Wally Blount; CM Lodestar; Principal; Producer
Ron Fogel; Creative Realities, Inc.; Principal; General interest (joined at this meeting)
Jason Friedman; Creative Realities, Inc.; Alternate; General interest (joined at this meeting)
Wes Jenkins; Down Stage Right Industries; Observer; Producer
Reid Neslage; H & H Specialties Inc.; Principal; Producer
Rodney F. Kaiser; J.R. Clancy Inc.; Principal; Producer
Jay O. Glerum; Jay O. Glerum & Associates, Inc.; Principal; User
Andrew Smith; Jeamar Winches Inc.; Principal; Producer (joined at this meeting)
Chuck McClelland; Jeamar Winches Inc.; Alternate; Producer (joined at this meeting)
John R. Burgess; John R. Burgess; Individual, User (voting status reinstated at this meeting)
Gary Justensen; Oasis Stage Werks; Observer; Producer
Tim Cox; PLASA; Alternate; General interest (joined at this meeting)
Teddy Van Bommel; PRG Lighting Division; Principal; User
Richard Nix; Sacramento Theatrical Lighting; Principal; General interest (change of company representation at this meeting)
Bill Sapsis; Sapsis Rigging, Inc.; Principal; User
Rocky Paulson; Stage Rigging, Inc.; Principal; User
Jerry Gorrell; Theatre Safety Programs; Principal; General interest
F. Robert Bauer; Theatrix Inc.; Observer; User
Keith Bohn; Tomcat USA, Inc.; Alternate; Producer (joined at this meeting)
Peter Hind; Total Fabrications Ltd.; Principal; Producer

Visitors: Edie Kramer; IATSE Local 1, Radio City Music Hall
Louis Bradfield; Bally's Las Vegas

1. Opening remarks

Mike Garl called the meeting to order at 7:07 p.m.

Mike Garl described how we will expedite the truss standard comment resolution. The working group will recess while the task group meets to resolve the comments. Then the working group will reconvene to vote on accepting the resolutions.

2. Attendance and membership

2.1 Introduction of those present

Those present introduced themselves.

2.2 Call for quorum (8 needed)

Thirteen voting members were present at the beginning of the meeting. Mike Garl announced, "We clearly have a quorum."

2.3 Requirements for membership

Mike Garl said that anyone with an interest in the work of the group can join. People have to apply, and the working group has to approve the application with a simple majority vote. Garl reminded the group of the attendance requirement.

3. Processing of new membership requests

The following had applied for membership:

Ron Fogel; Creative Realities, Inc.; Principal; Producer
Jason Friedman; Creative Realities, Inc.; Principal; Producer
Richard Nix; Sacramento Theatrical Lighting; Principal; General interest (change of company representation)
Luigi Sbalzarini; Selvolina SNC; Observer; Producer
Charles E. Gorgen; Minnesota Crane Corp.; Observer; Producer
Andrew Smith; Jeamar Winches Inc.; Principal; Producer
Chuck McClelland; Jeamar Winches Inc.; Alternate; Producer
Keith Bohn; Tomcat USA, Inc.; Alternate; Producer
Tim Cox, PLASA, Alternate, General Interest

Jay O. Glerum moved that they all be accepted. Bill Sapsis seconded the motion. Unanimous by show of hands.

4. Approval of minutes from the previous meeting

Jay O. Glerum moved that the minutes be accepted as written. Richard Nix seconded the motion. Unanimous by show of hands.

5. ESTA Declarations

Mike Garl read the following golden prose:

5.1 Anti-Trust Statement:

The ESTA Board of Directors, the Technical Standards Committee, and the leadership of this Working Group will reject or nullify any actions that restrain trade. Anyone who feels that an action restraining trade is being or has been taken is requested to bring the 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 any member of this working group maybe found individually liable for any action that restrains trade taken by this working group. An individual convicted of a violation of the Sherman Act may be fined as much as \$100,000 and be imprisoned for up to three years. An easy to read pamphlet describing restraint of trade is available from the Technical Standards Committee.

5.2 Call for patents:

ESTA intends to publish no standard that contains protected intellectual property, unless that property can be licensed by anyone for a reasonable fee. ESTA uses a process of open patent disclosures to implement this intent. ESTA does not conduct patent searches and does not warrant that its standards contain no protected intellectual property.

In keeping with the open disclosure policy, I ask if anyone present wishes to notify the working group of the existence of a patent that might protect material in a standard being developed by the working group. You need not be the holder of the patent in order to notify the working group of its existence.

6. Approval of Agenda

Mike Garl moved the discussion of the aluminum truss standard to the end of old business.

Bill Sapsis moved we accept the agenda with this change. Wally Blount seconded the motion. Unanimous by show of hands.

7. Old Business

7.1 E1.1 – Wire Rope Ladder Standard – status report

Ruling reported that the draft standard will go to public review again, starting December 4, and running to February 22, 1999.

7.3 E1.4 – Manual Counterweight Flying Systems Standard – status report

Ruling reported that it is now in public review, and will be until January 5, 1999. If anyone wants a copy of it, it's on the web, or Ruling will mail a copy to him or her.

7.4 E1.6 – Powered Flying Systems – comment resolution

Rod Kaiser reported that Jon Lagerquist and his people are working on it.

7.5 E1.7 – Recommended Practice for Flying Performers – comment resolution

Delbert Hall was not at the meeting, but was presumed to be working on it. Steve Butner commented that Peter Foy would like to address the group at the next meeting.

7.6 E1.8 – Speaker Enclosures Rigging Standard – comment resolution – Andrew Martin

Ruling read Andrew Martin's faxed message to the working group:

"At the moment the re-write and revision of E1.8 is still in progress. Several standards references are being worked into the draft, including existing standards from EIA and UL. I believe the new draft will address all concerns, however I am getting some resistance to the effort by some manufacturers that are concerned about the economic impact the draft standard will have if approved.

"Support for the standard effort is good overall, however participation is still low. Nevertheless, I shall press on with the effort. I hope to have a new draft complete by the end of the year."

7.7 E1.10 – Building Structural Requirements Standard – comment resolution

Jerry Gorrell reported that he's still working on it. He asked the group for its sense on the guard rail issue. He suggested it could be deleted since guardrails are covered in other standards. The consensus of the group was that this section should be deleted.

Gorrell plans to have resolutions to offer the group by next meeting.

7.8 British Standards – update

Peter Hind reported on the BS7905 and 7906 efforts. Hind said, "The whole thing is a mess." The working group, MHE313, is paying no heed to the work of ESTA. "It is grinding to a halt."

Jay O. Glerum wanted to go on the record as saying that moving toward European standards in the area of rigging is a bad idea. We do things so differently on this continent than in Europe that there is no way we can move our standards over there, or adopt their standards here.

Peter Hind clarified his comments by saying that our truss standard has been worked into the British standard to a large extent, but the manual counterweight standard has not been incorporated at all.

7.9 Arena Scoreboards and Speakers, IAAAM/ESTA – update

Jay O. Glerum reported that there is a definite need for a standard for rigging for arena scoreboards and speakers. Wally Blount said one was needed for rigging based on using chain hoists, too. Glerum says there is a need for a task group to come forward, but at the IAAM meeting in July there was no urge to do this.

Mike Garl appointed Wally Blount to head a task group to develop a draft standard for speaker cluster and scoreboard rigging. The scope statement should be done by next meeting. Wally was asked to put together the task group.

7.10 Standard for Theatrical Boom & Base Assemblies – progress report

Richard Nix agreed that the document is too construction based. It needs to be more performance based. He said he needs some feedback from manufacturers about performance criteria. "That's what we're in the process of assimilating," said Nix. Nix wants to have a new version of the document ready for the January meeting.

7.2 E1.2 – Aluminum Truss Standard – comment resolution

Mike Garl recessed the meeting at 8:10 to convene a task group meeting to resolve the comments received during the public review of the aluminum trusses and towers standard.

The working group meeting was reconvened at 11/11/98 9:20 p.m.

Mike Garl read the task group resolutions to the comments:

Comments 1 General: This standard reflects a lot of hard work by many people. Congratulations to you all for its present condition.
Rocky Paulson
Stage Rigging

Resolution:
Thank you

Comment 2 Section 2, Definitions, page 6, line 10: The word "an" (third from last word) is not the correct word. Suggest replace the word "an" with "on." The corrected sentence should read: "Repetitive use: Truss and tower modules assembled and dismantled on multiple occasions."
M. Brad Dittmer
Associated Theatrical Contractors

Resolution:
Accept, make change suggested.

Comment 3 Section 2, page 6: The definition for competent person should be added to this section if any of my later comments are adopted which change some of the uses of "qualified" person to "competent" person. The definition used should be the one adopted by our committee if possible.

Rocky Paulson
Stage Rigging

Resolution:

Accept, add definition of "Competent Person"

Comment 4 Section 3 and 4: I notice that at page 3 line 14 is stated that this draft should be given to British Standard. As I said last time, from my understanding about Euro Norms, this draft will have no chance to become a European standard.

The most of the Norms are already uniformed into Euro Norms, and aluminium Towers and trusses are only a very little part of temporary buildings. Norms for temporary buildings are also exist at the EC (European Community).

As I said last time that will change the draft radically.

Section 3 to section 4 has to be brought to standard to scope with the regulations of the European Community.

Related Norms.

DIN EN 287 Welders approval

DIN EN 288 Welding procedures

DIN EN 485 Technical details Aluminium plates

DIN EN 515 Aluminium and Aluminium alloys; Wrought products

DIN EN 573 Aluminium and Aluminium Alloys; Chemical composition

DIN 4113 Aluminium constructions under predominantly static loads

DIN 4112 Temporary buildings

DIN EN 1090 Execution of steel structures (pr EN 1090)

Explanations:

DIN German standard

EN European Standard

Conclusion: Give the draft back to the Truss Team to change Section 3 and 4 to European standards.

Joachim Stoecker
Camco GmbH

Resolution:

Delete lines 13-15 on Page 3 with sentence beginning, "It is the intention of the Professional ..."
This standard has been developed as an American National Standard.

Comment 5 Section 4.5.1, page 10, lines 13 - 15: This statement does not make it clear that each module should have a unique mark, such as a serial number. The standard should require unique marks so that a paper trail of inspections (including manufacture inspections prior to initial sale) can be created. The standard requires both manufacturer inspections and user inspections. Records of these inspections cannot be kept without serial numbers or some other unique marking system. See section 6.6 Records.

Rocky Paulson
Stage Rigging

Resolution:

Change 4.5.1 to read "The manufacturer shall mark each truss module with an identification mark unique to that manufacturer and to that module. The mark shall be easily recognizable."

Comment 6 Section 5.5.3, page 12, line 14: It is my opinion that the supervision of truss assembly does not require a "qualified person." Generally speaking this term is used for engineers or other highly skilled people. It seems that someone like a rigger or lighting crew chief who is designated "competent" by his employer should be able to supervise this activity.

Rocky Paulson
Stage Rigging

Resolution:

Accept, make change as suggested.

Comment 7 Section 5.5.6, page 12, line 30: I do believe that sections 5.5.4 and 5.5.5 correctly require the assistance of a "qualified person." It seems that a "competent person" could carry out the inspections referenced in this section.

Rocky Paulson
Stage Rigging

Resolution:

Accept, make change as suggested.

Comment 8 Section 6.1, page 12: While I agree that the user should seek out information, the manufacturer must be required to provide inspection criteria in sufficient detail for their customers to realistically carry out these inspections. If the safety of the product is dependent on inspections, then the manufacturer has the obligation to provide the necessary information for their product to be used safely. The general criteria listed in this standard certainly do not quantify sufficiently any rejection criteria, so the user has no recourse other than the manufacturer.

Rocky Paulson
Stage Rigging

Resolution:

Agree, add "in accordance with Section 6" to line 43 of Page 10

Comment 9 Section 6.3.1, Inspection Intervals, page 13, line 8: If this initial inspection is to be the basis for record keeping for the truss modules, it should have some date for point of reference, as well as any pertinent notations that future inspections should be related to. This would not be the case if the frequent inspection procedure were adhered to, since the frequent inspection procedure requires no records to be kept. (See Section 6.2.1.)

M. Brad Dittmer
Associated Theatrical Contractors

Resolution:

Agree. Add ", but records shall be kept and maintained for the duration of possession." To the end of the 1st sentence.

Comment 10 Section 6.3.1, Inspection Intervals, page 13, line 8: Suggest changing "... in accordance with Section 6.4 of ..." to "... in accordance with Section 6.5 of" The corrected sentence would read: "When purchased or acquired, whether new from the manufacturer or used, all truss modules shall be inspected in accordance with Section 6.5 of this standard."

M. Brad Dittmer
Associated Theatrical Contractors

Resolution:

Leave as changed for comment 9. 6.5 is too onerous for owners.

Comment 11 Section 6.3.1, page 13, line 8: Since section 6.4 does not require record keeping the reference to 6.4 should be changed to 6.5 which does. The initial inspection by the user should require records.

Rocky Paulson
Stage Rigging

Resolution:

See comment 9

Comment 12 Section 6.4.1, page 13, line 36: It is my opinion that inspection of truss modules does not require a "qualified person." Generally speaking this term is used for engineers or other highly skilled people. It seems that someone like a rigger or lighting crew chief who is designated "competent" by his employer should be able to supervise this activity.

Rocky Paulson
Stage Rigging

Resolution:

Accept, make change as suggested.

Comment 13 Section 6.4.1, page 14, line 5: Since 6.5 requires inspection of 100% of the welds, and this section does not (by omission), which welds are to be inspected? Was it the intent that the same inspection of welds takes place in 6.4 and 6.5?

Rocky Paulson
Stage Rigging

Resolution:

Yes. Repeat lines 40 & 41 of 6.5.1 in 6.4.1

Comment 14 Section 6.5, page 12: Overall there seems little difference between the 6.4 and 6.5 inspections. Why are there two types? Is 6.5 supposed to be more thorough? If so, why is excessive wear of fasteners not checked in 6.5 while it is checked in 6.4? As a user, these procedures don't help us much, however requiring the use of a dye penetrant and the mandatory training associated with its use would add a significant cost to us as users.

Rocky Paulson
Stage Rigging

Resolution:

Yes, 6.5 is suppose to be more thorough.

Add "excessive ware" under fasteners in 6.5

Comment 15 Section 6.5.1, page 14, line 17: From reviewing the inspection items, this does not seem much more complicated than the 6.4 inspection, does it require a "qualified person?"

Rocky Paulson
Stage Rigging

Resolution:

Yes, no change

Jay O. Glerum moved that we accept the comment resolutions as read. Peter Hind seconded the motion. Seventeen in favor by show of hands. None against. The Chair abstained. The motion carried with a super majority

Ron Fogel moved that E1.2, amended to incorporate the resolutions, be sent to a third public review. Teddy van Bommel seconded the motion. By roll call:

NAME	COMPANY	STAT	Accept	A in Prin	A in Part	Reject
Steve Butner	Aerial Rigging & Leasing, Inc.	P	X			
Jim Fletcher	American Sling Company, Inc.	P				
Brad Dittmer	Associated Theatrical Contractors	P	X			
Andrew T. Martin	ATM Group, Inc.	P				
Eric Todd	BML Inc.	P	X			
Paul Tardue	BML Inc.	A				
Wally Blount	CM Lodestar	P	X			
Jim Krull	CM Lodestar	A				
Ron Fogel	Creative Realities, Inc.	P	X			
Roland Van Wensveen	Doughty & Prolite, Inc.	P				
Reid Neslage	H & H Specialties Inc.	P	X			
Rodney F. Kaiser	J.R. Clancy Inc.	P	X			
Jack Suesse	J.R. Clancy, Inc.	A				
Mervyn Thomas	James Thomas Engineering Ltd.	A				
Mike Garl	James Thomas Engineering, Inc.	P	X			
Tray Allen	James Thomas Engineering, Inc.	A				
Jay O. Glerum	Jay O. Glerum & Associates, Inc.	P	X			
Andrew Smith	Jeamar Winches Inc.	P	X			
Mark Herman	Lift-All Co., Inc.	P				
Gregory Babinchak	Lift-All Co., Inc.	A				
Ian J. Warhurst	Lite Structures (GB) Ltd.	P				
Selvolina SNC	Luigi Sbalzarini	N				
Richard Nix	Sacramento Theatrical Lighting	P	X			
Billy Phillips	Phillips Rigging	P				
Tim Cox	PLASA	A	X			
Tony Douglas-Beveridge	PLASA Standards Office	P				
Teddy Van Bommel	PRG Lighting Division	P	X			
George Sabbi	PRG Lighting Division	A				
Randall W. A. Davidson	Risk International & Associates, Inc.	P				
Bill Sapsis	Sapsis Rigging, Inc.	P	X			
Rocky Paulson	Stage Rigging, Inc.	P	X			
Bill Björkman	Stage Rigging, Inc.	A				
Jerry Gorrell	Theatre Safety Programs	P	X			
Keith Bohn	Tomcat USA, Inc.	A	X			
Michael Wells	Tomcat USA, Inc.	P				
John James	Tomcat USA, Inc.	A				
Mark Newlin	Tomcat USA, Inc.	A				
Mitch Clark	Tomcat USA, Inc.	A				
Peter Hind	Total Fabrications Ltd.	P	X			
Ian Coles	Total Structures, Inc.	A				
			18			

Eighteen in favor. None opposed. Motion carried.

8. New Business – Breaking working group into two groups – Jay Glerum

Jay Glerum presented the idea of breaking the working group into two: one to cover arena rigging, and the other to cover theatrical rigging. Having smaller working groups might make the standards-drafting process move faster. The proposal was discussed. The major problems identified with the proposal were that there is significant overlap of members' interests, additional committee meetings would cost more and would be more difficult to schedule. Glerum withdrew the proposal.

9. Other Business

None

10. Schedule for Future Meetings

Mike Garl announced that the next meeting would be on Friday, January 22, 1999, at 7:00 p.m. in Irving, TX at the Dallas/Ft. Worth Marriott. This is located very close to the Dallas/Ft. Worth Airport

The meeting at the USITT conference would be Wednesday, March 24, 1999, at 7:00 p.m.

11. Changes of membership status resulting from lack of attendance.

Mike Garl reminded the working group members of the attendance requirement:

Attendance requirement: "Every principal member of the working group is required to attend meetings. Any principal member or voting alternate who misses 3 consecutive meetings will have their membership status changed from principal member to observer. This action will be taken as the last item of business at each meeting and recorded in the minutes of that meeting."

Due to lack of attendance, the following people were moved to observer status:

Jim Fletcher, American Sling Co.
Ian Warhurst, Lite Structures (GB) Ltd.
Billy Phillips, Phillips Rigging
Randy Davidson, Risk International

John Burgess asked to be accepted back as a voting member and said he would respond to letter ballots in the future. Brad Dittmer moved that he be accepted as a voting member. Eric Todd seconded the motion. Unanimous by show of hands.

12. Adjournment

Bill Sapsis moved we adjourn. Eric Todd seconded the motion. No objections.

Mike Garl declared the meeting adjourned at 9:52 p.m.

Rigging Working Group Membership List As of the End of the 11/11/1998 Meeting

Name	Company	Vote Stat.	Interest Cat.
Steve Butner	Aerial Rigging & Leasing, Inc.	P	P
Jim Fletcher	American Sling Company, Inc.	O	P
Brad Dittmer	Associated Theatrical Contractors	P	U
Andrew T. Martin	ATM Group, Inc.	P	P
Eric Todd	BML Inc.	P	P
Paul Tardue	BML Inc.	A	P
Robert Mullett	Bose Corporation	O	P
Joachim Stoecker	CAMCO GmbH	O	P
Ted Jones	Chicago Spotlight, Inc.	O	U
Marty Lazarus	Chicago Spotlight, Inc.	O	U
Wally Blount	CM Lodestar	P	P
Jim Krull	CM Lodestar	A	P
Ron Fogel	Creative Realities, Inc.	P	G
Jason Friedman	Creative Realities, Inc.	A	G
Harry Donovan	Donovan Rigging, Inc.	O	U
Roland Van Wensveen	Doughty & Prolyte, Inc.	P	P
Wes Jenkins	Down Stage Right Industries	O	P
David M. Campbell	Geiger Engineers	O	G
Paul Brady	Grand Stage Company, Inc.	O	U
Reid Neslage	H & H Specialties Inc.	P	P
Delbert Hall	Hall Associates Inc.	O	U

Name	Company	Vote Stat.	Interest Cat.
Jack Suesse	J.R. Clancy, Inc.	A	P
Rodney F. Kaiser	J.R. Clancy Inc.	P	P
Mike Garl	James Thomas Engineering, Inc.	P	P
Tray Allen	James Thomas Engineering, Inc.	A	P
Mervyn Thomas	James Thomas Engineering Ltd.	A	P
Jay O. Glerum	Jay O. Glerum & Associates, Inc.	P	U
Andrew Smith	Jeamar Winches Inc.	P	P
Chuck McClelland	Jeamar Winches Inc.	A	P
John Kaes	John Kaes	O	U
John R. Burgess	John R. Burgess	I	U
Gregory Babinchak	Lift-All Co., Inc.	A	P
Tim Gauss	Lift-All Co., Inc.	O	P
Mark Herman	Lift-All Co., Inc.	P	P
Ian J. Warhurst	Lite Structures (GB) Ltd.	O	P
Bill Webb	Martin Audio Ltd.	O	P
Charles E. Gorgen	Minnesota Crane Corp.	O	P
Ted Hickey	OAP Audio Products	O	P
Gary Justensen	Oasis Stage Werks	O	P
Joseph Rapiere	Parkhill, Smith & Cooper, Inc.	O	P
Patrick Stansfield	Patrick Stansfield Assoc., Inc.	O	U

Name	Company	Vote Stat.	Interest Cat.
Peter Letzelter-Smith	Peter Letzelter-Smith	O	U
Billy Phillips	Phillips Rigging	O	P
Tim Cox	PLASA	A	G
Tony Douglas-Beveridge	PLASA Standards Office	P	G
George Sabbi	PRG Lighting Division	A	U
Teddy Van Bommel	PRG Lighting Division	P	U
Scott Mohr	R&R Cases and Cabinets	O	G
Mark Fitch	Renkus-Heinz, Inc.	O	P
Rikki Newman	Rikki Newman	O	U
Randall W. A. Davidson	Risk International & Associates, Inc.	O	U
Heinz Siller	RST Präsentationssysteme	O	G
Richard Nix	Sacramento Theatrical Lighting	P	G
Bill Sapsis	Sapsis Rigging, Inc.	P	U
Luigi Sbalzarini	Selvolina SNC	O	P
Michael Wood	Slick Systems International (UK)	O	P
Jon Lagerquist	South Coast Repertory	O	U
Jerrold S. Tiers	St. Louis Music Inc.	O	P
Rocky Paulson	Stage Rigging, Inc.	P	U
Bill Björkman	Stage Rigging, Inc.	A	U
Richard C. Mecke	Texas Scenic Company	O	P

Name	Company	Vote Stat.	Interest Cat.
Alan Broadhurst	The Broadhurst Partnership	O	P
Jerry Gorrell	Theatre Safety Programs	P	G
Ed Nicholas	Theatrical Lighting Systems, Inc.	O	U
F. Robert Bauer	Theatrix Inc.	O	U
Mitch Clark	Tomcat USA, Inc.	A	P
Mark Newlin	Tomcat USA, Inc.	A	P
John James	Tomcat USA, Inc.	A	P
Michael Wells	Tomcat USA, Inc.	P	P
Keith Bohn	Tomcat USA, Inc.	A	P
Peter Hind	Total Fabrications Ltd.	P	P
Ian Coles	Total Structures, Inc.	A	P
Warren A. Bacon	Warren A. Bacon	O	U

Voting Status

- P Principal voting representative for a company or organization
- A Alternate voting representative for a company or organization
- I Individual representing no organization other than himself or herself
- O Observer; non-voting

Categories of interest

- P Producer (manufacturer) of rigging equipment
- U User of rigging equipment
- G General interest in rigging equipment