

**Minutes  
 Technical Standards Committee  
 Wednesday, 19 March 2003  
 Hilton Minneapolis  
 Minneapolis, MN**

**Chairman:** Paul Vincent; Vincent Lighting Systems; P

**Recording secretary:** Karl G. Ruling; ESTA

**Members attending:** William Conner; Schuler & Shook Inc., representing the Amer. Society of Theatre Consultants; P  
 Steve Terry; Electronic Theatre Controls; P  
 Mitch Hefter; Entertainment Technology (Genlyte Thomas Group LLC); P  
 Mike Wood; High End Systems Inc.; P  
 Edwin S. Kramer; I.A.T.S.E, Local 1; P  
 Larry Schoeneman; Interesting Products, Inc.; P  
 Mike Garl; James Thomas Engineering, Inc.; P  
 Edward Paget; Jones & Phillips Associates, Inc.; P  
 Ken Vannice; Colortran (Leviton Manufacturing Co., Inc.); P  
 Matthew Griffiths; PLASA; P  
 Colin Waters; TMB; P  
 Lori Rubinstein; ESTA; ex officio

**Visitors:** Bob Luther; Lex Products  
 William Krokaugger; Mole-Richardson Co.  
 Ron Bonner; PLASA  
 James Eade; PLASA  
 Kent Jorgensen, MPS Grips Local 80  
 Roger Lattin, IATSE 728

**1 Opening remarks**

Paul Vincent called the meeting to order at 13:07, and thanked all present for attending the meeting and the USITT Conference and Stage Expo. He asked people to turn off cell phones and pagers.

**2 Attendance and membership**

**2.1 Taking attendance**

A members and visitors sign-in sheet was circulated. Those present introduced themselves.

**2.2 Welcome to visitors**

Paul Vincent welcomed the visitors.

The consensus body during this meeting, including those not in attendance, was:

Name	Company	Representing	Voting status
William Conner	Schuler & Shook Inc.	ASTC	P
Robin Crews	Wrightson, Johnson, Haddon & Williams, Inc.	ASTC	A
Steve Terry	Electronic Theatre Controls		P
Mitch Hefter	Entertainment Technology (Genlyte Thomas Group LLC)		P
Mike Wood	High End Systems Inc.		P
Edwin S. Kramer	I.A.T.S.E, Local 1		P
Larry Schoeneman	Interesting Products, Inc.		P
Mike Garl	James Thomas Engineering, Inc.		P
Edward Paget	Jones & Phillips Associates, Inc.		P
Ken Vannice	Colortran (Leviton Manufacturing Co., Inc.)		P

Tony Douglas-Beveridge	PLASA	PLASA	A
Matthew Griffiths	PLASA	PLASA	P
Frank Stewart	Specialty Tech Services		P
Colin Waters	TMB		P
Rodney F. Kaiser	J.R. Clancy Inc.	USITT	P
Jay O. Glerum	Jay O. Glerum & Associates, Inc.	USITT	A
Paul Vincent	Vincent Lighting Systems		P
Florian von Hofen	VPLT	VPLT	P
Eckart Steffens	SOUNDLIGHT	VPLT	A
			15 votes

### 3 Approval of minutes from the previous meeting

Mike Garl moved that the draft minutes be approved as written. The motion was seconded. The motion was approved with a unanimous voice vote.

### 4 Call for patents

The following was read aloud by Paul Vincent.

"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 Technical Standards Committee of the existence of a patent or copyright that might protect material in a standard being developed by a working group. You need not be the holder of the patent or copyright in order to notify the TSC of its existence."

No issues were brought to the attention of the assembly.

### 5 Anti-trust statement

The following was read aloud by Paul Vincent:

"The ESTA Board of Directors and the leadership of this Technical Standards Committee 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 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 \$100,000 and imprisoned for up to three years. An easy to read pamphlet describing restraint of trade issues is available from the Technical Standards Manager."

No issues were brought to the attention of the assembly.

### 6 Approval of agenda

Larry Schoeneman moved that the draft agenda be adopted. The motion was seconded. The motion was approved by a unanimous voice vote.

### 7 Distribution of ESTA committee contact information

Lori Rubinstein distributed ESTA committee lists with contact information. She also distributed meeting schedules.

### 8 Old business

#### 8.1 Financial reports

##### 8.1.1 Treasurer's report

Lori Rubinstein said that we have no report because there is only one month's worth of information. A partial year report will be provided at the July meeting.

### **8.1.2 Status of contributions and pledges**

Lori Rubinstein reported that contributions are continuing to be received at a good rate, which is heartening. The steps of the Investors in Innovation Program have worked to encourage giving. A new employee at Stageworks had meant a drop in category for that company, but John Cooke increased his donation to stay at the same level.

### **8.1.3 Accounting of TSP documents sold and on-hand**

Lori Rubinstein had no report at this time.

## **8.2 Working group reports**

### **8.2.1 Camera Cranes 13:25**

Kent Jorgensen reported that the committee chair hasn't done the editing he was going to do on the handbook. When that is done, it will be sent to Kent Jorgensen, who will send it to Karl Ruling. Ruling should have it next week.

### **8.2.2 Control Protocols**

#### **8.2.2.1 E1.11 (DMX)**

Mitch Hefter reported that the cabling and wiring issues have been stripped from the E1.11 document. He has a comment resolution document for the working group. The new draft standard is done except for the PICS. He will ask that it be sent to public review at the next meeting.

#### **8.2.2.2 Cabling**

Hefter reported that a cabling task group has been formed. It has three rough documents covering portable, permanently installed, and temporary cabling. He anticipates having drafts for the working group to review at the July meeting.

#### **8.2.2.3 E1.17 (ACN)**

Steve Terry said that the last part of the puzzle is the device description language (DDL). There is some dissent in the task group about the DDL. He had hoped for a DDL document for the working group at this meeting, but that probably won't happen, so the next meeting will have the complete suite of documents.

#### **8.2.2.4 E1.20 (Remote Device Management)**

Steve Terry said that a first draft of the document was expected soon, but that it probably won't be presented at this CPWG meeting.

There was a discussion of the intellectual property that might be required to be used to implement E1.20 or E1.17. Mike Wood said that High End's policy (open licensing at no cost) still holds, but that the portfolio of patents involved is getting larger.

### **8.2.3 Fog and Smoke**

#### **8.2.3.1 E1.5 - Glycol and glycerin fog standard**

Larry Schoeneman reported that on February 28 the TSC approved E1.5, so now it's before the ESTA Board for approval.

#### **8.2.3.2 BSR E1.23 – General fog standard**

Schoeneman reported that Karl Ruling had put together a document out of working group contributions. The working group will review it.

#### **8.2.3.3 Guidance document for fire alarms and fire detection systems**

Schoeneman reported that Greg Meeh has some written material for the F&S Working Group to consider.

#### **8.2.4 Photometrics**

Karl Ruling reported that the working group was not happy with IESNA LM 73 as it is being developed. That draft standard specifically rules out the use of camera-based photometry systems, but these systems are the type used by all stage and studio manufacturers. Thus, the draft IESNA standard is not useful for our manufacturers. The working group is considering writing its own standard for camera-based photometry systems, because a standard has been needed for several years, but one does not seem to be forthcoming from the IESNA.

#### **8.2.5 Rigging**

##### **8.2.5.1 E1.2 – Aluminum towers and trusses revision**

Mike Garl reported that it's in public review.

##### **8.2.5.2 E1.4 – Manual Rigging Systems**

Mike Garl reported that the task group is working on comment resolutions.

##### **8.2.5.3 E1.6 – Powered Rigging Systems**

Karl Ruling reported that the public review ended March 11. He has not yet collated the comments and sent them to the working group. Ruling reported that the task group is drafting responses to Hans van der Moolen's previous letters.

##### **8.2.5.4 E1.7 – Recommended Practice for Flying Performers**

Ruling reported that the comment resolutions have been approved, but that no motions have been offered on the revised document yet.

##### **8.2.5.5 E1.8 – Speaker Enclosures Rigging Standard**

Ruling reported that draft resolutions and a revised draft standards document have been sent to the working group.

##### **8.2.5.6 E1.15 – Manufacture, Assembly, and Use of Theatrical Boom & Base Assemblies**

Garl reported that it is in comment resolution.

##### **8.2.5.7 E1.21 – Portable roof systems**

Garl reported that the task group is working on a first draft. There have been some family problems that have diverted the task group leader from the project.

##### **8.2.5.8 E1.22 – Fire curtain systems**

The draft standard was sent to the TSC less than two weeks before this meeting. Steve Terry moved that we waive the two-week rule. The motion was seconded. The motion was approved unanimously on a voice vote.

Ted Paget moved that the draft E1.22 standard be sent to a first public review. The motion was seconded. The motion was approved on a roll call ballot.

Name	Company	Representing	Voting status	Yes	No	Abstain
William Conner	Schuler & Shook Inc.	ASTC	P	1		
Robin Crews	Wrightson, Johnson, Haddon & Williams, Inc.	ASTC	A			
Steve Terry	Electronic Theatre Controls		P	1		
Mitch Hefter	Entertainment Technology (Genlyte Thomas Group LLC)		P	1		
Mike Wood	High End Systems Inc.		P	1		
Edwin S. Kramer	I.A.T.S.E, Local 1		P	1		
Larry Schoeneman	Interesting Products, Inc.		P	1		
Mike Garl	James Thomas Engineering, Inc.		P	1		
Edward Paget	Jones & Phillips Associates, Inc.		P	1		
Ken Vannice	Colortran (Leviton Manufacturing Co., Inc.)		P	1		
Tony Douglas-Beveridge	PLASA	PLASA	A			
Matthew Griffiths	PLASA	PLASA	P	1		
Frank Stewart	Specialty Tech Services		P			
Colin Waters	TMB		P	1		
Rodney F. Kaiser	J.R. Clancy Inc.	USITT	P			
Jay O. Glerum	Jay O. Glerum & Associates, Inc.	USITT	A			
Paul Vincent	Vincent Lighting Systems		P	1		
Florian von Hofen	VPLT	VPLT	P			
Eckart Steffens	SOUNDLIGHT	VPLT	A			
			15 votes	12		

### 8.2.5.9 Electrical Connectors On Chain Hoist Control Cables

Garl announced that we have a project to deal with hoist control connectors. Brian Dowd will present a report and scope statement at the next meeting.

### 8.2.6 Electrical Power

#### 8.2.6.1 E1.18 - Task group on a recommended practice for selection, installation, and use of portable feeder cable

Ken Vannice said the document is on schedule for a complete version by the summer working group meeting.

#### 8.2.6.2 E1.19 - Task group for a recommended practice for use of residual current devices in entertainment applications.

Vannice reported that the project is under control and making progress. We have a lot of new information about what UL is doing in regards to ground fault protection devices, and we need to study and understand it because it has a bearing on this document.

#### 8.2.6.3 EMC task group (including EMC Workshops/LFEIC report)

No news, reported Ken Vannice.

#### 8.2.6.4 E1.24, pin connector intermateability standard

Mitch Hefter said that the task group hadn't planned to start serious work on this project until summer. Right now they are circulating the USITT standard on which this will be based.

### 8.2.7 Floors

Karl Ruling reported that a scope statement for a standard is expected soon. He can announce the start of a standards-drafting project for floors when he has that and evidence of a vote to formally start the standards project.

## 8.3 Report on liaisons to other industry groups

### 8.3.1 NFPA

**8.3.1.1** Bill Conner reported on the results of the emergency meeting of the assembly occupancies and membrane structures technical committee that was held March 13 in Quincy, MA. A series of proposals for tentative interim amendments (TIA) to NFPA 101 and NFPA 5000 came out of the meeting. One would make the sprinkler requirements for existing assembly occupancies be the same as those for new assembly occupancies. That is, grandfathering of existing facilities would end in regard to sprinkler systems. Another series of TIAs would require crowd managers for all places except places of worship holding fewer than 2000 people. Another set of TIAs would ban festival seating unless a risk assessment is done and this is approved.

Conner said that there is the unaddressed problem that the assumptions of how long people can take to get out are perhaps fundamentally flawed. We may have to require more or wider paths of egress. Unfortunately, rules about egress requirements are the rules most frequently broken, so changing the rules may not improve safety.

**8.3.1.2** Ken Vannice reported that the NEC is now in the 2005 revision cycle. Code Panel 15 met on Hilton Head Island in January. He was able to meet the members of the newly constituted code panel and the new chairman. There were no proposals that are so far out of line that we need to be concerned about them. The Report On Proposals, when it's published, will have all the proposals and all the panel deliberations, and will provide a detailed report.

### **8.3.2 UL**

Roger Lattin said UL has started work on the 1640 portable power distribution project.

### **8.3.3 PLASA/ESTA Technical Standards Program partnership**

The possibility of a closer working relationship between ESTA and PLASA in regard to technical standards was discussed in an executive session at the end of the formal TSC meeting.

### **8.4 Consideration of a replacement for Tera Johnson**

Paul Vincent suggested that Mark Engel of Rosco Laboratories would make a good addition to the TSC. Mark Engel has expressed an interest.

Ted Paget moved that we recommend to the ESTA President that Mark Engel be invited to join the TSC. The motion was seconded. The motion was accepted by a unanimous voice vote.

Lori Rubinstein said that Bill Gallinghouse of ETC has offered the services of David Lincecum to give us advice and help on marketing issues, but not to join the TSC.

### **8.5 Discussion forums**

Lori Rubinstein reported that few people are using the archived email reflectors. Steve Terry said that people have been reluctant to sign up because it seems like work. The consensus was that people will use it once they get used to it and once the non-archived reflectors are shut down.

### **8.6 Review of action items from last meeting not covered above**

Karl Ruling reviewed the action item list.

There was a discussion of the conference call request form. Ruling was directed to send it to the working group chairs via email so they have it.

## **9 New Business**

None.

## **10 Other business**

Lattin reported that Cal OSHA told the movie industry that all employees must be safety-trained by May 2005. Now there is a scramble to get the thousands of employees trained. Employees are being paid to attend training sessions.

## **11 Schedule for future meetings**

The meeting schedule was distributed earlier in the meeting with the contact information. (Please see item 7.)

The next TSC meeting is scheduled for Friday, July 25 at the Dallas/Ft. Worth Airport Marriott South in Ft. Worth, Texas. The following meeting is scheduled to be held in conjunction with the ETS-LDI trade show on Wednesday, November 19 at the Sheraton World, Orlando, Florida.

## 12 Adjournment

Larry Schoeneman moved that the meeting adjourn. The motion was seconded. The motion was approved by a unanimous voice vote. Paul Vincent declared the meeting adjourned at 15:02. The executive session was scheduled for 15:15 to allow a short break.

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### Technical Standards Committee Membership

Name	Company	Representing	Voting status
William Conner	Schuler & Shook Inc.	Amer. Society of Theatre Consultants	P
Robin Crews	Wrightson, Johnson, Haddon & Williams, Inc.	Amer. Society of Theatre Consultants	A
Steve Terry	Electronic Theatre Controls		P
Mitch Hefter	Entertainment Technology (Genlyte Thomas Group LLC)		P
Mike Wood	High End Systems Inc.		P
Edwin S. Kramer	I.A.T.S.E, Local 1		P
Larry Schoeneman	Interesting Products, Inc.		P
Mike Garl	James Thomas Engineering, Inc.		P
Edward Paget	Jones & Phillips Associates, Inc.		P
Ken Vannice	Colortran (Leviton Manufacturing Co., Inc.)		P
Matthew Griffiths	PLASA	PLASA	P
Tony Douglas-Beveridge	PLASA	PLASA	A
Frank Stewart	Specialty Tech Services		P
Colin Waters	TMB		P
Rodney F. Kaiser	J.R. Clancy Inc.	USITT	P
Jay O. Glerum	Jay O. Glerum & Associates, Inc.	USITT	A
Paul Vincent	Vincent Lighting Systems		P
Florian von Hofen	VPLT	VPLT	P
Eckart Steffens	SOUNDLIGHT	VPLT	A

Voting status: P = principal; A = alternate