

**Minutes**  
**Technical Standards Committee**  
**Friday, 25 July 2003**  
**Dallas/Ft. Worth Airport Marriott South**  
**Ft. Worth, TX**

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

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

**Members attending:** Frank Stewart; Specialty Tech Services; P  
Larry Schoeneman; Interesting Products, Inc.; P  
Mike Garl; James Thomas Engineering, Inc.; P  
Colin Waters; TMB; P  
Mike Wood; High End Systems Inc.; P  
Ken Vannice; Colortran (Leviton Manufacturing Co., Inc.); P  
Edwin S. Kramer; I.A.T.S.E, Local 1; P  
Steve Terry; Electronic Theatre Controls; P  
Rodney F. Kaiser; J.R. Clancy Inc., representing USITT ; P  
Mitch Hefter; Entertainment Technology (Genlyte Thomas Group LLC); P  
William Conner; Schuler & Shook Inc., representing Amer. Society of Theatre  
Consultants; P  
Robin Crews; Wrightson, Johnson, Haddon & Williams, Inc., representing Amer.  
Society of Theatre Consultants; A  
Matthew Griffiths; PLASA; P  
Mark Engel; Rosco Laboratories; P (by telephone)  
Lori Rubinstein; ESTA; ex officio  
Bill Maiman; ESTA; ex officio

**Visitors:** Rick Rudolph; Stage Equipment and Lighting  
Ron Bonner; PLASA  
Greg Herald; Kleege Industries Inc.  
Kevin Kleege; Kleege Industries Inc.  
Bob Luther; Lex Products  
Steven Ehrenberg; Clear Channel Entertainment - Theatrical  
Michael Gonzales; Spectrum Lighting  
Kent Jorgensen; MPS Grips Local 80

**1 Opening remarks**

Paul Vincent called the meeting to order at 13:07 and made announcements while the hotel staff set up the speaker phone to allow Mark Engel to participate by teleconference.

Paul Vincent asked those present to introduce themselves, which they did.

**2 Attendance and membership**

Paul Vincent noted that a quorum was present so the TSC could conduct business.

**2.1 Taking attendance**

A chartreuse attendance sign-in sheet was circulated. TSC members and visitors were asked to use it to record their presence.

**2.2 Welcome to visitors**

Paul Vincent welcomed the visitors.

The voting body for this meeting, including those not present, was:

| Name                   | Company   | Representation | 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             |
| Matthew Griffiths      | PLASA   | PLASA          | P             |
| Tony Douglas-Beveridge | PLASA   | PLASA          | A             |
| Mark Engel             | Rosco Laboratories                                  |                | 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             |
|                        |   |                | 16            |

### 3 Approval of minutes from the previous meeting

Paul Vincent offered editorial corrections to the minutes. Karl Ruling made the required corrections to the draft document, creating a version r1.

Larry Schoeneman moved that the minutes with editorial corrections be accepted. The motion was seconded. The motion was approved with a unanimous voice vote.

### 4 Call for patents

The following statement 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 patent issues were brought to the attention of the group.

### 5 Anti-trust statement

The following statement 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."

Bill Maiman held up some of the easy-to-read pamphlets to show that they were available. No restraint of trade issues were brought to the attention of the assembly.

## **6 Approval of agenda**

Additions to the agenda were proposed:

- New business
  - IBC
  - Modifying our P&P
- Liaisons
  - CANENA

Eddie Kramer moved that the revised agenda be accepted. The motion was seconded. The motion was approved with a unanimous voice vote.

## **7 Distribution of ESTA committee contact information**

Lori Rubinstein distributed the ESTA committee contact information and corrections were offered by Mitch Hefter and Robin Crews.

## **8 Old business**

### **8.1 Financial reports**

#### **8.1.1 Treasurer's report**

Copies of the report were distributed. Frank Stewart noted that we are under the budget at the moment, and said that he hoped our budget would stay that way because we have budget expense increases forecast for next year. Stewart asked to be alerted by working group chairs if they need additional funds.

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

Lori Rubinstein said that she had little news to report. We should see all of the pledges honored, except, perhaps, for the pledge from Altman Stage Lighting. She asked for anyone with contacts with that company to please speak on our behalf.

The PLASA trade show VAT refund program has not yielded the donations it has in the past, Rubinstein noted.

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

Lori Rubinstein reported that sales are extraordinarily slow. USITT had sold one document.

### **8.2 Working group reports**

#### **8.2.1 Camera Cranes**

Karl Ruling noted the lack of progress on the working group's projects and it's failure to meet at least once a year. There is nothing to show on the BSR E1.12 standard project, and the operator's handbook, which was promised six months ago, had not been forwarded to him.

Kent Jorgensen reported on the problems that have held up the operator's handbook for six months.

Steve Terry moved that we send a letter to the chairs stating that they have 60 days to deliver a document for public review and to hold a meeting. If nothing is delivered, the working group will be disbanded. The motion was seconded. Terry noted that clause 7.2 of the P&P allows the TSC to disband any working group that has not met regularly, which is defined as at least once a year. The motion was approved by a unanimous show of hands, except for Mark Engel, who cast his "yes" vote by voice over the speaker phone.

#### **8.2.2 Control Protocols**

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

The draft document is in public review, reported Steve Terry.

#### **8.2.2.2 Cabling**

Terry explained that the cabling issues of E1.11 have been moved to another task group. This group has drafted a scope document.

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

Terry announced that a complete suite of documents describing the protocol now exists. The working group will consider a motion for a first public review at the next CPWG meeting.

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

Terry announced that a document of 147 pages describing the draft standard is complete. The working group also will consider sending it to a first public review at the next CPWG meeting.

#### **8.2.2.5 ACN-RDM ESTA Interconnectivity Pavilion**

Steve Terry said that the good news is that we have the pavilion on the ETS-LDI show floor. The bad news is that we have to figure out the details of what to present in the pavilion and how this presentation shall be accomplished. These issues will be discussed at the next working group meeting. The project will need a manager, and one will be identified at the meeting.

### **8.2.3 Fog and Smoke**

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

Larry Schoeneman noted that ANSI E1.5-2003 is now posted on the ESTA website for free download. He also distributed a copy of an advertisement for various publications about the fog testing program. The testing program now references the ANSI E1.5 standard.

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

Schoeneman reported that we are working on a standard for planning and executing general fog effects, something along the lines of the NFPA's 1126 and 160 standards for pyrotechnic and flame effects respectively.

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

Schoeneman reported that we are also exploring a new project to write a guidance document for people who specify fire detection systems. The intent would be to give some guidance on how to specify a system that provides fire protection but is not prone to generating false alarms because of theatrical fog.

### **8.2.4 Photometrics**

Karl Ruling reported that the main project of the working group is now BSR E1.25, a standard to describe the basic luminaire testing conditions to be used in flat-wall photometry.

### **8.2.5 Rigging**

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

Mike Garl reported that the public review of the revisions closed April 15. Few comments had been received. The task group will meet this evening to work on comment resolutions.

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

Garl reported that the Rigging Working Group has a draft comment resolution document and a revised draft standard to consider at its meeting. If the resolutions are accepted, there will probably be a motion to send the draft standard to another public review.

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

Garl reported that the last public review on this project closed March 11. The task group is working on drafting suggested resolutions for the working group to consider.

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

Garl reported that BSR E1.7 is in public review until the end of the business day in New York on July 29.

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

Garl reported that proposed public review resolutions were presented to the working group at the last meeting but were not approved. A revised set has been received. The working group needs to consider them at its next meeting.

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

Garl reported that a set of proposed public review resolutions have been submitted to the working group. These will be discussed at the Rigging Working Group meeting.

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

Mike Garl reported that the task group is making progress and will meet tomorrow to do more work. The document is not ready for vetting by the working group yet.

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

Bill Conner reported that the first public review ended June 10 and that the task group is in the process of drafting some proposed resolutions to the comments received. The task group met yesterday (Thursday, 24 July) and this morning. Some of the comments fundamentally challenge the way we have been making fire curtains for 100 years, Conner remarked. Other comments challenging some of the tests specified have raised fire engineering technical issues that go beyond the level of expertise in the task group now. Conner says they are working on getting people with more expertise in these areas involved in the project.

### **8.2.5.9 Chain hoist motor connectors**

Garl reported that the Rigging Working Group may have a scope statement presented at the working group meeting this evening.

## **8.2.6 Electrical Power**

### **8.2.6.1 E1.18 - A recommended practice for selection, installation, and use of portable feeder cable.**

Ken Vannice reported that the draft document so far does not address all the issues the working group has identified as needing to be addressed, but a lot of work has been done. There will be an effort to work on sections that are appropriate for Canadian users.

### **8.2.6.2 E1.19 - A recommended practice for use of residual current devices in entertainment applications.**

Ken Vannice reported that this project is moving forward fitfully. The task group has met to rejuvenate the project. The task group will break the document into two parts so that the recommendations on the application of class A GFCI devices is not bogged down by trying to develop recommendations for emerging special ground fault protection devices.

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

Vannice reported that there are some issues of note on the international scene:

- 1) The US rep to the IEC has told Ken Vannice that there has been some movement toward looking at systems for harmonics control, rather than looking at the harmonics of individual devices. This is a systems approach vs. a product approach.

2) There is confusion about the "under consideration" statement in the powerline emissions standard that contains the exemption for dimmers commonly used in entertainment applications. The phrase will be moved to an informative annex so that people do not think that "under consideration" means that regulations are imminent.

3) There is continued discussion about horizontal versus vertical standards. Should emission standards cut across all product lines, or should there be emission standards tailored to specific products?

On the national scene, there is a move in the FCC to put broadband signals on the powerlines. We are concerned because this might require a tightening of powerline emissions standards. The work so far is about home systems and coupling around transformers, but we need to watch this. The document describing this proposal was published in the Federal Register and goes by the document number FR doc 03-12914. Comments are due on this proposal by August 6.

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

Mitch Hefter stated that there hasn't been any significant work done on this project so far. This lack of progress by this point was planned. He is leading the task group and the working group agreed that nothing could be expected to be done until the E1.11 project was in public review and Hefter had some time to work on the pin connector project. There is no work to be done on BSR E1.11 for a while, so the first pin connector task group meeting is scheduled for tomorrow night (Saturday, 26 July).

#### **8.2.7 Floors**

Bill Maiman reported that the working group will vote on a proposal for a floors standard scope at its next meeting.

### **8.3 Report on liaisons to other industry groups**

#### **8.3.1 NFPA**

Larry Schoeneman reported that the cycle for review of NFPA 160 and NFPA 1126 will be accelerated.

Karl Ruling reported on the tentative interim amendments for NFPA 101, the Life Safety Code. These were covered in *Standards Watch* volume 7, number 13.

Representation by entertainment technology industry members on NFPA 80 (fire doors and windows) was discussed. The idea of having our rejected applicants be alternates to Bill Conner and Jerry Gorrell was considered.

Ken Vannice reported on the National Electrical Code (NFPA 70). The Report on Proposals will be published in CDROM and paper format. Comments on the ROP will be due by 10/31.

#### **8.3.2 UL**

Lori Rubinstein reported that our lawyer's firm -- Bell, Boyd & Lloyd -- also represents UL

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

Matthew Griffiths reported that the final presentation to the Board will be made on August 8th. There is the Europe vs. US issue, but also the manufacturer (PLASA) vs. dealer (ESTA) orientation. We need to be aware of these differences in viewpoints.

#### **8.3.4 CANENA**

Ken Vannice reported on the CANENA project, which is dealing with single-pole connectors in North America. He said he likes the way they work in that you write a clause, and then you write the justification for what you wrote. The document thus has a running narrative in it, describing all the

decisions that were made. The justifications are stripped out later just before publication, but are kept on record.

#### **8.4 Discussion forums (archived email reflectors)**

The consensus was that people shall be informed that the old reflectors will be turned off on September 1.

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

None.

### **9 New Business**

#### **9.1 IBC**

Bill Conner put forth this motion: "The TSC shall appoint an authorized representative to speak for ESTA regarding some of the proposed changes to the International Building Code and other codes in the International Code Family."

Conner argued that the International Building Code is fast becoming the predominate model building code used in the US and will before long probably be the model code in over 90% of the jurisdictions, including New York City. It includes regulation for theatres and other places of assembly which ESTA members serve and the regulation does affect their products and services. Conner clarified that his motion does not include a position in regard to the IBC and in regard to any proposals to change it at this time. A position would have to be established by the TSC or a sub-committee, or by some other method that is appropriate.

Conner also stated that he has made similar proposals to USITT and to IAAM, and suggested that they might want to coordinate their positions on the IBC with ASTC or ESTA or both. Conner mentioned the position that the ASTC has taken in regard to proposals that would change the IBC to require fire safety curtains in more venues.

After some friendly discussion, the motion was amended to be: "The TSC shall appoint Bill Conner as the authorized representative to speak for ESTA regarding some of the proposed changes to the International Building Code and other codes in the International Code Family." The motion was seconded. The motion was approved by a unanimous voice vote.

#### **9.2 Modifying our P&P**

A new version of our P&P (document number TSC/2001-0001r6) was discussed. This version, called version 5 on the title page, has changes highlighted from version 4.5 in the following sections:

##### **14.6.1 Approval by the working group**

When the working group feels that no further changes to normative sections of a standards document are warranted, the working group may vote to accept the document as a standard and forward it to the Technical Standards Committee for approval. The approval requirement shall be a super-majority, and the vote may be taken either after the last public review of the document or simultaneously with it. All members of the consensus body shall have the opportunity to vote on the final approval of a document or portion thereof that is intended to be submitted to the American National Standards Institute as a proposed American National Standard.

##### **14.6.1.1 Vote after the last public review**

A vote for final approval by the working group of a draft standard after the last public review shall be conducted by letter ballot or roll call ballot taken at a meeting. Absentee votes (see 8.4) shall be solicited before a meeting at which a roll call ballot for final approval is anticipated.

These proposed changes, Karl Ruling explained, were in response to the proposed changes to ANSI's basic requirements for developing consensus standards. The proposed changes would require all members of a consensus body to have an opportunity to vote on the final approval of a standard; the vote should not be limited to only those in attendance at a particular meeting. The advantage of this for ESTA's TSP would be that the final vote would clearly be the consensus of the group, and would be less likely to be biased in favor of the interest category or voting entities with the biggest budget to attend meetings. It has the disadvantage of possibly lengthening the time it takes to develop a standard. If the absentee ballot provision in our current P&P is used (as specified in 14.6.1.1) there need be no lengthening of the development time. If a letter ballot is required, the additional time would be less than two months, which is a very short time in relation to the years it takes to develop a standard.

Rodney Kaiser moved that the new version of the P&P (TSC/2001-0001r6) be accepted. The motion was seconded. The motion was approved by a supermajority of 14 out of a 16 on a roll call ballot. Ted Paget and the representatives for VPLT were not present.

| Name                   | Company   | Representation | Voting status | Yes | No | Abstain |
|------------------------|---|----------------|---------------|-----|----|---------|
|                        |   |                |               |     |    |         |
| William Conner         | Schuler & Shook Inc.                                | ASTC           | P             | 1   | 0  | 0       |
| Robin Crews            | Wrightson, Johnson, Haddon & Williams, Inc.         | ASTC           | A             | 0   | 0  | 0       |
| Steve Terry            | Electronic Theatre Controls                         |                | P             | 1   | 0  | 0       |
| Mitch Hefter           | Entertainment Technology (Genlyte Thomas Group LLC) |                | P             | 1   | 0  | 0       |
| Mike Wood              | High End Systems Inc.                               |                | P             | 1   | 0  | 0       |
| Edwin S. Kramer        | I.A.T.S.E, Local 1                                  |                | P             | 1   | 0  | 0       |
| Larry Schoeneman       | Interesting Products, Inc.                          |                | P             | 1   | 0  | 0       |
| Mike Garl              | James Thomas Engineering, Inc.                      |                | P             | 1   | 0  | 0       |
| Edward Paget           | Jones & Phillips Associates, Inc.                   |                | P             | 0   | 0  | 0       |
| Ken Vannice            | Colortran (Leviton Manufacturing Co., Inc.)         |                | P             | 1   | 0  | 0       |
| Matthew Griffiths      | PLASA   | PLASA          | P             | 1   | 0  | 0       |
| Tony Douglas-Beveridge | PLASA   | PLASA          | A             | 0   | 0  | 0       |
| Mark Engel             | Rosco Laboratories                                  |                | P             | 1   | 0  | 0       |
| Frank Stewart          | Specialty Tech Services                             |                | P             | 1   | 0  | 0       |
| Colin Waters           | TMB   |                | P             | 1   | 0  | 0       |
| Rodney F. Kaiser       | J.R. Clancy Inc.                                    | USITT          | P             | 1   | 0  | 0       |
| Jay O. Glerum          | Jay O. Glerum & Associates, Inc.                    | USITT          | A             | 0   | 0  | 0       |
| Paul Vincent           | Vincent Lighting Systems                            |                | P             | 1   | 0  | 0       |
| Florian von Hofen      | VPLT  | VPLT           | P             | 0   | 0  | 0       |
| Eckart Steffens        | SOUNDLIGHT  | VPLT           | A             | 0   | 0  | 0       |
|                        |   |                | 16            | 14  | 0  | 0       |

## 10 Other business

Lori Rubinstein announced that the Certification Electrical Skills meeting tonight will be held in Village. The Rigging Working Group will meet in Trinity V and VI.

## 11 Schedule for future meetings

The ESTA meeting schedule had been handed out earlier in the meeting, along with the contact information. Lori Rubinstein asked working group chairs to review the future schedule and the audio-visual needs.

The next TSC meeting is scheduled for 13:00 to 17:00, 19 November 2003, at the Sheraton World Resort in Orlando, Florida.

## 12 Adjournment

Larry Schoeneman moved that the meeting adjourn. The motion was seconded. The motion was approved on a unanimous voice vote. Paul Vincent declared the meeting adjourned at 16:15.



**Membership and Contact Information as of 2003-10-07**

| Name                   | Company   | Representing                         | Voting status |
|------------------------|---|--------------------------------------|---------------|
| William Conner         | Schuler & Shook Inc.                                | Amer. Society of Theatre Consultants | P             |
| Robin Crews            | Wrightson, Johnson, Haddon & Williams               | 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.)               |                                      | P             |
| Tony Douglas-Beveridge | PLASA   | PLASA                                | A             |
| Matthew Griffiths      | PLASA   | PLASA                                | P             |
| Mark Engel             | Rosco Laboratories                                  |                                      | 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             |

Voting status: P = principal; A = alternate