

**Minutes**  
**Technical Standards Committee**  
**Wednesday, 9 November 2005**  
**Rosen Plaza Hotel**  
**Orlando, Florida**

**Chairman:** Mike Garl; James Thomas Engineering, Inc.; P

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

**Members attending:** William Conner; Bill Conner Associates LLC, representing the Amer. Society of Theatre Consultants; P  
Larry Schoeneman; Designlab Chicago, Inc.; P  
Steve Terry; Electronic Theatre Controls, Inc.; P  
Mitch Hefter; Entertainment Technology (Genlyte Group LLC); P  
Edwin S. Kramer; I.A.T.S.E. Local 1; P  
Ken Vannice; Colortran (Leviton Manufacturing Co., Inc.); P  
Mike Wood; Mike Wood Consulting LLC; P  
Bill Groener; PRG Lighting North Bergen; P  
Mark Engel; Rosco Laboratories; P  
Bill Sapsis; Sapsis Rigging, Inc.; P  
Frank Stewart; Specialty Tech Services; P  
Rodney F. Kaiser; J.R. Clancy Inc., representing USITT; P  
Florian von Hofen; VPLT; P

**Visitors:** David Saltiel; Bell Boyd & Lloyd LLC  
Roger L. Lattin; IATSE Local 728  
Tim Hansen; Oasis Stage Werks  
G. Clark Parkhurst, Jr.; NFPA Technical Committee on Special Effects  
Kent H. Jorgensen; IATSE Local 80

**1 Opening remarks**

Mike Garl called the meeting to order at 13:06. He welcomed all to "beautiful Orlando and LDI 2005." He reminded people to silence pagers and cell phones.

**2 Attendance and membership** (six required for a quorum) 13:02

**2.1 Taking attendance**

A blue attendance sign-in sheet was circulated.

**2.2 Welcome to visitors**

G. Clark Parkhurst Jr., the chairman of the NFPA special effects committee, was introduced by Larry Schoeneman. Mike Garl reiterated his welcome

The consensus body during this meeting, including any voting members not present, was:

Name	Company	Representing	Voting status
William Conner	Bill Conner Associates LLC	Amer. Society of Theatre Consultants	P
Robin Crews	Wrightson, Johnson, Haddon & Williams, Inc.	Amer. Society of Theatre Consultants	A
Larry Schoeneman	Designlab Chicago, Inc.		P
Steve Terry	Electronic Theatre Controls		P
Mitch Hefter	Entertainment Technology (Genlyte Group		P

Name	Company	Representing	Voting status
	LLC)		
Edwin S. Kramer	I.A.T.S.E. Local 1		P
Mike Garl	James Thomas Engineering, Inc.		P
Ken Vannice	Colortran (Leviton Manufacturing Co., Inc.)		P
Mike Wood	Mike Wood Consulting LLC		P
Matthew Griffiths	PLASA	PLASA	P
Ron Bonner	PLASA	PLASA	A
Bill Groener	PRG Lighting North Bergen		P
David Johnson	Entertainment Design (Primedia)		P
Mark Engel	Rosco Laboratories		P
Bill Sapsis	Sapsis Rigging, Inc.		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
Florian von Hofen	VPLT	VPLT	P
Eckart Steffens	SOUNDLIGHT	VPLT	A
			17

**3 Approval of minutes from the previous meeting** (document TSC/2005-0004)

Steve Terry moved that the minutes be accepted as written. The motion was seconded. The motion was approved with a unanimous show of hands.

**4 Call for patents**

The following statement was read aloud to the assembly by Mike Garl

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

Mike Wood said that there was a continuation of a Colortran networking patent. Ken Vannice said that Leviton would treat it (i.e. license it) as it has with the others.

**5 Anti-trust statement**

The following statement was read aloud to the assembly by Mike Garl

"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 \$1,000,000 and imprisoned for up to ten years. An easy to read pamphlet describing restraint of trade issues is available from the Technical Standards Manager."

Karl Ruling, the Technical Standards Manager, held up some of the easy-to-read pamphlets.

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

## 6 Approval of agenda

Steve Terry moved that the draft agenda be accepted as written. The motion was seconded. The motion was approved with a unanimous show of hands.

## 7 Reminder about ESTA committee contact information on the website

Lori Rubinstein reminded people that the contact and committee information is posted on the ESTA website and that they should check it for accuracy. No changes were noted as being needed.

## 8 Old business

### 8.1 Financial reports

#### 8.1.1 Treasurer's report

Frank Stewart's treasurer's report had been distributed by email. Additional hard copies were distributed by Lori Rubinstein. There was a discussion of the format.

Bill Groener offered a ringing endorsement of the efforts of the treasurer to make a clear report. He thanked Frank for his years of service. The assembly gave Frank a round of applause for his efforts.

#### 8.1.2 Status of contributions and pledges

Lori Rubinstein announce that we had recently received two large pledges, for which we had been waiting.

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

Lori Rubinstein announced that the ESTA Foundation has taken over sales of TSP documents as of September 1. USITT will continue to sell our documents, but will purchase them from the ESTA Foundation at the same discount rate offered to PLASA.

### 8.2 P&P Revision

David Saltiel said that the "would be" clauses in the interest group definitions should be changed to "is" because they are all statements of fact rather than unreal or possible future conditions. Karl Ruling made the change.

Steve Terry moved we accept the document with the changes recommended by David Saltiel. The motion was seconded. The motion was approved unanimously by all present, which was a supermajority of the voting body:

Name	Company	Representing	Voting status	Yes	No	Abstain
William Conner	Bill Conner Associates LLC	Amer. Society of Theatre Consultants	P	X		
Robin Crews	Wrightson, Johnson, Haddon & Williams, Inc.	Amer. Society of Theatre Consultants	A			
Larry Schoeneman	Designlab Chicago, Inc.		P	X		
Steve Terry	Electronic Theatre Controls		P	X		
Mitch Hefter	Entertainment Technology (Genlyte Group LLC)		P	X		
Edwin S. Kramer	I.A.T.S.E. Local 1		P	X		
Mike Garl	James Thomas Engineering, Inc.		P	X		
Ken Vannice	Colortran (Leviton Manufacturing Co., Inc.)		P	X		
Mike Wood	Mike Wood Consulting LLC		P	X		
Matthew Griffiths	PLASA	PLASA	P			

Name	Company	Representing	Voting status	Yes	No	Abstain
Ron Bonner	PLASA	PLASA	A			
Bill Groener	PRG Lighting North Bergen		P	X		
David Johnson	Entertainment Design (Primedia)		P			
Mark Engel	Rosco Laboratories		P	X		
Bill Sapsis	Sapsis Rigging, Inc.		P	X		
Frank Stewart	Specialty Tech Services		P	X		
Colin Waters	TMB		P			
Rodney F. Kaiser	J.R. Clancy Inc.	USITT	P	X		
Jay O. Glerum	Jay O. Glerum & Associates, Inc.	USITT	A			
Florian von Hofen	VPLT	VPLT	P	x		
Eckart Steffens	SOUNDLIGHT	VPLT	A			
			17	14	0	0

### 8.3 Working group reports

#### 8.3.1 Camera Cranes

##### 8.3.1.1 Crane handbook, publication progress report

Karl Ruling said that the PDF version was available.

Kent Jorgensen handed out a mockup of a hard-copy version. Logo and font problems have delayed its publication, but it is almost done, he said.

##### 8.3.1.2 BSR E1.12 camera crane standard

Kent Jorgensen reported that the working group had met in January and in June, and that progress had been made.

Karl Ruling asked why the most recent draft version has fewer words than the previous version. Jorgensen explained that the earlier version was largely a copy of the A92 motorized platform standard and that the newer version has that borrowed and inappropriate text removed.

#### 8.3.2 Control Protocols

##### 8.3.2.1 E1.11 (DMX512-A), VPLT German/English update

Florian von Hofen explained that VPLT had run out of the budgeted money for translation work this year. The translation will be done next year, under the new budget.

##### 8.3.2.2 BSR E1.27-x (DMX512 cabling of various types)

###### 8.3.2.2.1 Public review report for BSR E1.27-1

Steve Terry reported that it is in public review now.

###### 8.3.2.2.2 Progress report on other BSR E1.27-x drafting

Steve Terry reported that work is continuing on a standard for fixed installations.

##### 8.3.2.3 BSR E1.17 (ACN), comment resolutions and revision report, possible vote for another public review.

Steve Terry moved that the suite of documents that make up the third public review draft of BSR E1.17 be offered for public review, contingent upon the Control Protocols Working Group accepting the second review resolution document and approving the offering of this suite of documents for public review without modification. The motion was seconded. The motion was approved by all present, which was a supermajority of the consensus body.

Name	Company	Representing	Voting status	Yes	No	Abstain

Name	Company	Representing	Voting status	Yes	No	Abstain
William Conner	Bill Conner Associates LLC	Amer. Society of Theatre Consultants	P	X		
Robin Crews	Wrightson, Johnson, Haddon & Williams, Inc.	Amer. Society of Theatre Consultants	A			
Larry Schoeneman	Designlab Chicago, Inc.		P	X		
Steve Terry	Electronic Theatre Controls		P	X		
Mitch Hefter	Entertainment Technology (Genlyte Group LLC)		P	X		
Edwin S. Kramer	I.A.T.S.E. Local 1		P	X		
Mike Garl	James Thomas Engineering, Inc.		P	X		
Ken Vannice	Colortran (Leviton Manufacturing Co., Inc.)		P	X		
Mike Wood	Mike Wood Consulting LLC		P	X		
Matthew Griffiths	PLASA	PLASA	P			
Ron Bonner	PLASA	PLASA	A			
Bill Groener	PRG Lighting North Bergen		P	X		
David Johnson	Entertainment Design (Primedia)		P			
Mark Engel	Rosco Laboratories		P	X		
Bill Sapsis	Sapsis Rigging, Inc.		P	X		
Frank Stewart	Specialty Tech Services		P	X		
Colin Waters	TMB		P			
Rodney F. Kaiser	J.R. Clancy Inc.	USITT	P	X		
Jay O. Glerum	Jay O. Glerum & Associates, Inc.	USITT	A			
Florian von Hofen	VPLT	VPLT	P	x		
Eckart Steffens	SOUNDLIGHT	VPLT	A			
			17	14	0	0

#### 8.3.2.4 ANSI E1.3-2001, 0-10V analog control specification: reaffirm, revise, or withdraw?

Steve Terry reported that this question about the future of ANSI E1.3-2001 will be on the agenda for the Control Protocols Working Group meeting.

#### 8.3.2.4 BSR E1.20 (Remote Device Management)

Steve Terry reported that we had a set of public review comments that must be reviewed and acted on. There is a problem with dissension within the task group. One of the members, who had not prevailed in his arguments in the task group and who was not present at the last working group meeting to present his arguments to the working group, had submitted them to as public review comments. This substantially increased the number of comments and the amount of work that must be done to resolve them. There was a discussion of how people might be encouraged to work out their differences before public review and to compromise, rather than to argue the same points at every step.

#### 8.3.2.5 E1.11 recommended practice

Steve Terry reported that Tim Bachman, who was leading the project, has had to withdraw from active participation in the CPWG because of his work. The future of the project is therefore in doubt. It may be taken over by another working group member.

### 8.3.3 Electrical Power

#### 8.3.3.1 BSR E1.18, Recommended practice for selection, installation, and use of portable feeder cable

Ken Vannice reported that the motion to offer it for public review vote failed on a letter ballot. The group will work on resolving the objections at the next working group meeting.

Roger Lattin said he will do a class on loop distribution systems so working group members can understand it better.

#### **8.3.3.2 BSR E1.19, Recommended practice for use of Class A GFCIs**

Ken Vannice reported that the public review ran from 5 August 2005 through 4 October 2005 and that responses had been received from six people, five of whom did not think it was ready to be adopted as an American National Standard. Therefore, we have some work to do to resolve the objections.

#### **8.3.3.3 BSR E1.24, pin connector intermatibility standard**

Karl Ruling reported that the review had run from 19 August through 18 October 2005, and that only two people had responded. One said Yes, the standard was ready for adoption, and the other said and Yes with Comments, and suggested the addition of some explanatory text.

Mitch Hefter said he planned to have a draft response to the comments, if required by the working group, ready for the meeting in January.

#### **8.3.4 Floors, BSR E1.26**

Tim Hansen said the document is in public review through 7 October 2005 through 6 December 2005. No comments yet.

#### **8.3.5 Fog and Smoke**

##### **8.3.5.1 BSR E1.23, General fog standard**

Larry Schoeneman reported that it's in public review from 21 October through 27 December 2005.

##### **8.3.5.2 *Introduction to Modern Atmospheric Effects, 4th edition***

It's published, reported Larry Schoeneman.

##### **8.3.5.3 ANSI E1.14-2001, Recommendations for Inclusions in Fog Equipment Manuals**

The working group must decide to start work to reaffirm, revise, or withdraw the standard, reported Larry Schoeneman.

##### **8.3.5.4 Maybe a BSR E1.29 for fog machine product safety**

Larry Schoeneman reported that we may work on a standard for assuring the safety of fog making equipment with the target audience being Nationally Recognized Testing Laboratories and fog machine manufacturers.

There was a discussion of how NRTLs work.

#### **8.3.6 Followspot Position**

Karl Ruling reported that the working group is making progress. The working group is so small that it is working as a task group, with much discussion at each meeting, but that there is work being done between meetings by individuals and smaller task groups.

Ruling reported that the working group felt the need for some public input, so they were holding a discussion panel at ETS-LDI to present their work accomplished so far to the public. This was to be in lieu of a working group meeting this month.

#### **8.3.7 Photometrics**

##### **8.3.7.1 BSR E1.25**

Karl Ruling reported that the document is in public review report from 4 November through 3 January 2006.

##### **8.3.7.2 ANSI E1.9-2001**

Karl Ruling reported that the fifth anniversary of E1.9 was approaching and that the working group will discuss taking action to reaffirm, revise, or withdraw the document at its meeting.

### **8.3.8 Rigging**

#### **8.3.8.1 BSR E1.1- 200X – Wire rope ladders**

Bill Sapsis reported that it is in public review from 14 October through 13 December 2005. That's the official ANSI review period, although it was posted on the ESTA website before then.

#### **8.3.8.2 BSR E1.2-200x – Aluminum towers and trusses**

The TSC ballot for the public review closed 26 October and the motion was accepted by a supermajority, all who voted, so it is posted on the ESTA website for public review now, reported Sapsis. The official ANSI review period will be from 18 November through 17 January 2006.

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

The TSC ballot for the public review closed 31 October and the motion was accepted by a supermajority, all who voted, so it is on the website now for public review, reported Sapsis. The official ANSI review period will be from 18 November through 17 January 2006.

#### **8.3.8.4 E1.6-1 and E1.6-2 – Powered Rigging Systems**

Bill Sapsis reported that progress was being made on the documents. There may be something to vote on at the working group meeting tonight.

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

Karl Ruling reported that ANSI had approved it on 3 November. Now we need to publish it. MaryLisa Kinney is our layout artist as well as our membership services coordinator, and she will work on it after LDI, after she issues the ESTA membership dues invoices.

#### **8.3.8.6 E1.15 – Boom & Base Assemblies**

Ruling reported that the Board had voted for its approval, but there had been abstention for reasons that suggested disagreement with the proposed standard. Therefore, the reasons for the abstention were being recirculated with a final vote closing of 24 November 2005.

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

Sapsis reported that the task group is working on resolutions.

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

Conner reported that the Rigging Working Group has a set of comment resolutions and a revised document to consider at its meeting.

### **8.4 Report on liaisons and news from other industry groups**

#### **8.4.1 PLASA**

Ruling reported that the PLASA representatives had sent regrets for not being able to attend the TSC meeting. Since they were not present, there was no report.

#### **8.4.2 USITT**

Mitch Hefter USITT recommended practice for light plot graphics had completed public review. They hope to have resolutions soon.

#### **8.4.3 ASTC**

Bill Conner reported that Van Philips has been in a serious automobile accident. He rolled his SUV. He survived, but he will need months in the hospital and in rehabilitation.

#### **8.4.4 VPLT**

Florian von Hofen had had to leave by this point in the meeting. There was no VPLT report.

#### **8.4.5 UL liaison**

Ken Vannice reported that CSA has removed from the industrial control equipment standard all products that are not motor controls or industrial factory process controls. He wrote to them and pointed out that this has removed all the architectural and entertainment dimmers, which had been Listed using that standard. What shall cover them if this standard does not? Vannice said that his letter seems to have surprised them, since they did not realize the affect of their revision of the standard. CSA asked for a list of affected parties and he suggested several trade groups.

Vannice reported that he thought this problem would also happen with UL. UL is moving to adopt IEC standards, and Vannice does not think the IEC industrial control equipment covers dimmers.

Ken Vannice talked about the need for the UL 1573 technical committee to respond to the most recent proposals from UL staff. He pressed members of the committee to comment, and they did.

#### **8.4.6 CANENA liaison**

Vannice reported that the CANENA group has been meeting by email.

#### **8.4.7 NFPA liaison**

##### **8.4.7.1 NFPA 70 (NEC)**

Eddie Kramer reported that the proposal acceptance period closed recently. Article 519 has been proposed by Disney to cover their industrial controls, but there is no one from the entertainment industry on the committee for this article.

##### **8.4.7.2 NFPA 80**

The committee met acted and adjourned, reported Conner. He thinks the committee actions will institute draconian requirements for fire curtain closings. The actions were opposed by Jerry Gorrell and Bill Conner, but out-voted by the door manufacturers. Conner said that the committee chairman has pressured Bill Conner to not file an appeal, stating that it would not be in Conner's interests to exercise his rights per NFPA procedures. The report on comments needs to be balloted yet, so the committee actions are not final.

There was discussion of what action the TSC should take, if any. The consensus was that the TSC may step in to support what the Rigging Working Group wants to do about the changes to NFPA 80. Conner suggested that ESTA will want to complain about the lack of representation.

##### **8.4.7.3 NFPA 101 (Life Safety Code) and 5000 (building code)**

No news, reported Conner.

##### **8.4.7.4 NFPA 1126 (proximate pyro) and 160 (flame effects)**

Clark Parkhurst reported that the recent changes to the documents are not great. More fire extinguishers are required, but they do not require sprinkler systems in buildings where proximate pyro and flame effects are used, but some municipalities will require sprinkler systems. The style of the standards has been revised to look the same as the other NFPA standards.

#### **8.4.8 ICC**

Nothing to report, reported Conner.

#### **8.4.9 Other liaisons**

Lori Rubinstein gave a quick ETCP report. Over 180 riggers will be taking rigging exams on Saturday, 12 November. About 70 are taking exams in both arena and theatre rigging. She said that we're please with the number of people taking the exams.



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

None.

**9 New Business**

None.

**10 Other business**

Lori Rubinstein made a pitch for the raffle tickets being sold at LDI to support the ESTA Foundation. The tickets are \$50 each. First prize is a motorcycle and second is holiday in New York City to see shows.

**11 Schedule for future meetings**

Rubinstein announced that the next meeting is scheduled for the afternoon of Friday, 20 January 2006, at the Dallas/Ft. Worth Airport Marriott South. The following meeting will be the last week of March in Louisville.

**12 Adjournment**

Bill Sapsis moved that the meeting adjourn. The motion was seconded. The motion was approved by a unanimous show of hands. Mike Garl declared the meeting adjourned at 15:20.

**TSC Membership and Contact Information as of 29 November 2005**

Name	Company	Representing	Voting status
William Conner	Bill Conner Associates LLC	ASTC	P
Robin Crews	Wrightson, Johnson, Haddon & Williams, Inc.	ASTC	A
Larry Schoeneman	Designlab Chicago, Inc.		P
Steve Terry	Electronic Theatre Controls		P
Mitch Heffer	Entertainment Technology (Genlyte Group LLC)		P
Edwin S. Kramer	I.A.T.S.E. Local 1		P
Mike Garl	James Thomas Engineering, Inc.		P
Ken Vannice	Colortran (Leviton Manufacturing Co., Inc.)		P
Mike Wood	Mike Wood Consulting LLC		P
Matthew Griffiths	PLASA	PLASA	P
Ron Bonner	PLASA	PLASA	A
Bill Groener	PRG Lighting North Bergen		P
David Johnson	Entertainment Design (Primedia)		P
Mark Engel	Rosco Laboratories		P
Bill Sapsis	Sapsis Rigging, Inc.		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
Florian von Hofen	VPLT	VPLT	P
Eckart Steffens	SOUNDLIGHT	VPLT	A