

**Minutes  
 Technical Standards Committee  
 Wednesday, 21 March 2001  
 Westin Hotel  
 Long Beach, CA**

**Chair:** Bill Groener; Fourth Phase New Jersey (PRG); principal

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

**Members attending:** Tera Johnson; Electronic Theatre Controls, Inc.; principal  
 Mike Wood; High End Systems Inc.; principal  
 Larry Schoeneman; Interesting Products, Inc.; principal  
 Mike Garl; James Thomas Engineering, Inc.; principal  
 Edward Paget; Jones & Phillips Associates, Inc.; principal  
 Ken Vannice; NSI Corporation (Leviton Manufacturing Co., Inc.); principal  
 Tim Cox; PLASA; PLASA; principal  
 Mitch Hefter; Rosco/Entertainment Technology (Rosco Laboratories); principal  
 Colin Waters; TMB Associates; principal  
 Rodney F. Kaiser; J.R. Clancy Inc., representing USITT; principal  
 Eckart Steffens; SOUNDLIGHT, representing VPLT; alternate  
 Lori Rubinstein; ESTA; ex officio  
 Bill Maiman; ESTA; ex officio

**Visitors:** Tim Hansen; Oasis Stage Werks  
 Bob Luther; Lex Products  
 Roger L. Lattin; IATSE Local 728

**1 Opening remarks**

Bill Groener called the meeting to order and welcomed all to Long Beach at 13:08.

**2 Attendance and membership**

Groener noted that a quorum was present. The consensus body for this meeting was:

Name	Company or representation	Voting status
Tera Johnson	Electronic Theatre Controls, Inc.	principal
Bill Groener	Fourth Phase New Jersey	principal
Mike Wood	High End Systems Inc.	principal
Edwin S. Kramer	IATSE, Local 1	principal
Larry Schoeneman	Interesting Products, Inc.	principal
Mike Garl	James Thomas Engineering, Inc.	principal
Edward Paget	Jones & Phillips Associates, Inc.	principal
Ken Vannice	NSI Corporation	principal
Tim Cox	PLASA	principal
Tony Douglas-Beveridge	PLASA	alternate
Mitch Hefter	Rosco/Entertainment Technology	principal
Frank Stewart	Specialty Tech Services	principal
Colin Waters	TMB Associates	principal
Rodney F. Kaiser	USITT	principal
Jay O. Glerum	USITT	alternate
Florian von Hofen	VPLT	principal
Eckart Steffens	VPLT	alternate
		14 votes

## **2.1 Attendance**

A dusty rose attendance sheet was passed around so that members and visitors could indicate their presence.

## **2.2 Welcome to visitors**

Groener welcomed Roger Lattin, Tim Hansen, and Bob Luther.

## **2.3 Distribution of ESTA committee membership and contact information list**

Lori Rubinstein distributed the ESTA committee membership and contact information list asked for corrections to the contact information. Larry Schoeneman offered corrections for his contact information, and Eckart Steffens offered corrections for Florian's email address.

## **3 Approval of minutes from the previous meeting**

Mike Garl moved that the minutes be accepted as written. The motion was seconded. The motion was accepted unanimously by a show of hands.

## **4 Call for patents and anti-trust statement**

The following statement was read by Bill Groener:

"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 Chair.

The following statement was read by Bill Groener:

"The ESTA Board of Directors and the leadership of this Technical Standards Committee 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 committee may be found individually liable for any action that restrains trade taken by this committee. 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."

No issues were brought to the attention of the Chair.

## **5 Approval of agenda**

Groener asked that under 6.2.2, Control Protocols, we add a discussion of Tony Gottelier's article in L&SI.

Rubinstein asked that under new business we discuss the protocol articles by Andrea Sussman.

Ruling asked that under the ACN report we discuss a request for funding from Philip Nye.

Mike Wood moved that the agenda with these additions be accepted. The motion was seconded. The motion was approved unanimously on a voice vote.

## **6 Old business**

### **6.1 Financial reports**

#### **6.1.1 Treasurer's report**

No report.

#### **6.1.2 Status of contributions and pledges**

A report was distributed by Lori Rubinstein. Rubinstein said that an additional donation by EDI had been received but was not on the report because it arrived after she had left the office for Long Beach.

Eckart Steffens presented the contribution from Soundlight.

Rubinstein distributed the "Investors in Innovation" flyer, which shows the TSP donors and donation levels. The flyer was well received.

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

Lori Rubinstein reported that an accounting was not available because no new numbers were available from USITT. The USITT staff has been almost completely absorbed with preparing for the Conference and Stage Expo.

#### **6.1.4 Swag report**

Swag is for sale on the floor, reported Lori Rubinstein. The selection features the less-expensive offerings to appeal to USITT's students.

### **6.2 Working group reports**

#### **6.2.1 Camera Cranes**

Karl Ruling reported that the progress of this group is very slow. There was to have been a meeting on the 20th (yesterday) but the meeting was cancelled on the morning of the day it was to be held. The working group has not met since June of last year.

Ruling said that the working group's efforts have been focused solely on the camera crane operator's manual. However, the manual has many checklists that can be incorporated in the E1.12 camera crane standard, when work on that is begun.

Bill Groener said that he will talk to Ed Clare or send him a letter urging faster action, and noting that canceling a meeting at the last minute was not an efficient use of Ruling's time or the money it cost to send Ruling to meetings. Rubinstein noted that Ruling had traveled to Long Beach a day early for the Camera Cranes meeting, so an additional day's hotel and food expenses had been incurred without any benefit.

#### **6.2.2 Control Protocols 1:55**

##### **6.2.2.1 E1.3 guide**

Karl Ruling stated that the E1.3 guide had been approved for publication by the CPWG, and that this recommendation has been passed on to the TSC.

Mitch Hefter moved that the E1.3 guide be published. The motion was seconded. A roll call ballot was taken:

Name	Company or representation	Voting status	Accept	Accept in principle	Accept in part	Reject	Abstain
Tera Johnson	Electronic Theatre Controls, Inc.	P	X				
Bill Groener	Fourth Phase New Jersey	P	X				
Mike Wood	High End Systems Inc.	P	X				
Edwin S. Kramer	IATSE, Local 1	P					(not present)
Larry Schoeneman	Interesting Products, Inc.	P	X				
Mike Garl	James Thomas Engineering, Inc.	P	X				
Edward Paget	Jones & Phillips Associates, Inc.	P	X				
Ken Vannice	NSI Corporation	P	X				
Tim Cox	PLASA	P	X				
Mitch Hefter	Rosco/Entertainment Technology	P	X				
Frank Stewart	Specialty Tech Services	P					(not present)
Colin Waters	TMB Associates	P	X				
Rodney F. Kaiser	USITT	P	X				
Eckart Steffens	VPLT	A	X				
		14 votes	12	0	0	0	

The motion carried by a supermajority with all of those present, 12 of the voting body of 14, voting in favor.

The consensus was that the ESTA Board will have to vote on the motion by letter ballot, since the Board members will not have time to read the document before voting on it at the Board's next meeting.

#### 6.2.2.2 E1.11 (DMX)

Mitch Hefter reported that it is in public review through April 24. He also reported that there are four projects related to the E1.11 project:

1. A recommended practice for E1.11
2. A PICS for the standard
3. A standardized means of supplying accessory power along with data on one cable (but not using a 5-pin XLR connector)
4. Polled talkback on the primary data link

He also noted that the DMX on CAT 5 report document needs to be looked at by the working group again. This will be done at the meeting tomorrow, at which a motion will be made to publish the report on the ESTA website.

#### 6.2.2.3 E1.17 (ACN)

Mitch Hefter reported that that Steve Carlson sent his regrets for not being able to attend this meeting. Hefter read Carlson's emailed report:

I will not be at the TSC meeting on Wednesday. Here is an update on ACN:

-Reference Platform Software Specification 1.0 almost complete. Win32 thin client will be done in Visual Basic with direct calls to C language DLLs.

-Reference Platform Hardware will be commercial single-board computer with TCP/IP stack.

-New ACN reflector and private FTP site up and running, hosted by Martin.

-First cut of ACN code (done by Strand) is on the private FTP site. Substantial progress has been made, and some changes to the ACN architecture docs will be made based upon these results.

In summary, substantial progress has been made and test code is under review. I will be glad to provide more details to anyone who is interested. The ACN TG will discuss these items at their meetings at USITT. We do not yet have a release date for the Reference Platform. This meeting should make setting a timeline much easier.

Ruling stated that Philip Nye had requested funding for him to give a paper about BSR E1.17 (ACN) at the AES conference in New York. Tim Cox offered that PLASA would be willing to fund Philip's travel. Mitch Hefter moved that if the PLASA funding is not available, that the TSC will ask our treasurer to find the appropriate funding. The motion was seconded. The motion was approved unanimously by a show of hands of all those who were present, which at this time did not include Colin Waters. Waters had stepped out of the room to take a phone call.

#### **6.2.2.4 Tony Gottelier's article**

Bill Groener expressed concern that Tony's negative comments on patents in relation to standards and our patent policy in his "No Comment" column in L&S will have a negative effect on morale within the TSP. He also urged caution in talking to the press.

Groener asked working group chairs to discuss the patent issue with the working groups to allay any fears, if necessary. Working group chairs should be sensitive to this issue.

Groener asked for a pro-active campaign. He suggested that Karl Ruling's planned article for Protocol should deal with this pretty well.

Mike Wood stated that there is a move toward US-Europe patent procedure harmonization. The first step would be to change the US procedures to require the publication of applications. The second would be the addition of the requirement that patents be licensable. People would not be able to use patents to exercise a monopoly.

### **6.2.3 Fog and Smoke**

#### **6.2.3.1 Working group co-chair appointment**

Larry Schoeneman reported that Brad Dittmer had agreed to be the co-chair.

#### **6.2.3.2 E1.5, glycol/glycerin fog**

##### **6.2.3.2.1 ACGIH request**

Schoeneman expressed the F&S WG's frustration with the ACGIH and asked Ruling to explain the situation.

Karl Ruling explained that after much telephone tag and letters, a rather pro forma response to our request that the ACGIH set TLVs for the glycols and glycerin used in fog was received. This response showed that triethylene glycol, dipropylene glycol, butylene glycol, and glycerol are not under study, and these are probably the most commonly used poly-functional alcohols used in fog fluids. It was not clear from the response if ESTA's request was ever actually considered. Ruling said that he'd discussed the matter with Ms. Lisa Thomas at the ACGIH by telephone, and sent a request to her via email for more information as to why these chemicals were rejected for study. If the reason is lack of information, then we can collect more data. If the issue is that the audience is perceived as too small, then we need to make a better case for how large the audience is.

##### **6.2.3.2.2 Sampling project**

Schoeneman reported that USITT is being asked to help. Pitches are being made to the appropriate commissions.

**6.2.3.3** Eckart Steffens added that he had something to report at the F&S Working Group meeting. He said that there had been a report of a person at a Bon Jovi concert in Weimar who had a health problem while in a cracked oil fog. The medical authorities are interested in getting a sample of the cracked oil used so that they can test it on the subject.

Schoeneman proposed that he write a letter, which Karl Ruling and possibly David Saltiel will vet, asking for the results of whatever tests were done on this person.

**6.2.3.4** Ruling pointed out a problem with the vote on accepting E1.14. He had reported that it had passed in the January F&S Working Group meeting by a supermajority. Subsequently, the TSC and ESTA Board had voted to approve the draft standard. However, exactly six of the 12-member Fog & Smoke voting body participated in the meeting and voted in the affirmative. This was not technically a supermajority since a supermajority requires that more than half of the voting body vote in favor and this was exactly half. The working group will revisit the motion again at the upcoming meeting, and Ruling stated that he expected the motion to pass with a very clear supermajority this time. Ruling asked if the TSC wanted to revisit its vote on the matter now in light of the fact that the previous F&S Working Group affirmative vote was not technically a supermajority.

The sense of the TSC was that, unless the revote in the working group fails to achieve a supermajority, the TSC will not revisit the issue.

## **6.2.4 Photometrics**

### **6.2.4.1 Samples for E1.9, photometric data presentation standard**

Ruling reported that no work had been done on this subsidiary project to the ANSI E1.9-2001 standard since the last working group meeting – or, at least, that no work had been done that was going to be presented at the next meeting.

### **6.2.4.2 Public information project**

Ruling outlined his plan to have working group members write a series of stand-alone articles that can be combined into a book. He'll see how this is accepted by the working group at the meeting.

### **6.2.4.3 Co-chair**

Ruling reported that Larry Lieberman is willing to step down as co-chair. Lieberman has trouble attending the meetings, and Tom Tyler has had to chair every one of them since Larry and he became co-chairs. Tom and Karl had identified Jerry Gorrell as working group member with an excellent attendance record and a personal character that would make him suitable as a co-chair.

Ted Paget moved that Ruling talk to Jerry Gorrell about being co-chair, and, if he agrees, that he be made co-chair of the photometrics working group. The motion was seconded. The motion was accepted unanimously by a show of hands.

## **6.2.5 Rigging**

### **6.2.5.1 E1.4 – Manual Rigging Systems Standard**

Mike Garl reported that the task group is still working on comment resolutions. Rodney Kaiser, the task group head, said that they have made significant progress.

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

Garl reported that this document now includes the scope of the abandoned BSR E1.13 document. It also has a new title.

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

Garl reported that a motion to accept the comment resolutions is now being voted on by letter ballot.

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

Garl reported that the discussion of the comment resolutions and acceptance of the revised draft standard had been tabled until this meeting. Michael Akrep has joined the group as a voting member. He has been a major objector, and his active membership can facilitate the consensus-building dialogue inside the working group.

#### **6.2.5.5 E1.10 – Building Structural Requirements Standard**

Garl said that this project has a serious problem building consensus within the industry and may need to be abandoned.

#### **6.2.5.6 E1.13 – Arena Scoreboards and Speakers**

Ruling said that he'd reported to ANSI that we've abandoned the project.

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

Garl said that Richard Nix is rewriting the document. Ruling reported that we have translated the DIN standard for lighting stands, and that it is relevant and helpful.

#### **6.2.5.8 Standard for roof systems.**

Garl said that a project to draft a standard for roof systems has been proposed. A concrete proposal is expected at the working group meeting tonight.

#### **6.2.5.9 Co-chair**

Mike Garl says he's considering having a co-chair. He will ask for a volunteer.

#### **6.2.5.10 Site licenses**

Ruling stated that he'd received a request for a site license for intranet use of the ANSI E1.2-2000 standard (aluminum towers and trusses).

Ted Paget moved that electronic copies of standards be made available for site licensing in a form with a watermark noting the licensee, and that these shall be sold through USITT at twice the paper price. The motion was seconded. The motion was accepted unanimously by a show of hands.

### **6.2.6 Power**

#### **6.2.6.1 Task group on a recommended practice for selection, installation, and use of portable feeder cable**

Bob Luther reported that a survey to find out how people now use single-conductor power feeder cables has been completed and a protocol for administering it has been adopted.

#### **6.2.6.2 Task group for a recommended practice for use of GFCI (Residual Current Devices) in entertainment applications**

A document was presented at the meeting but no action was taken on it because it failed to meet the two-week rule. It will be distributed to the entire working group with the draft minutes. Working group members had been directed to read it and to comment on it.

Roger Lattin said that a recommended practice will be very useful in Hollywood, since there now seem to be many shows that use water.

#### **6.2.6.3 E1.16 – Task group to write a configuration standard for HMI power cables**

Luther reported that Brian Dowd has taken over this project because Warren Mays is no longer with TMB and is thus no longer a member of the working group. Mays left TMB on good terms, however, and Dowd will be able to get the information needed to complete the first draft of the standard from him.

#### **6.2.6.4 EMC task group**

Vannice reported that the LFEIC has decided to regroup and remarshal forces. They will continue to gather data on measured levels of harmonics on the mains. They will continue to attack stringent harmonic limits on a WTO barrier-to-trade level.

Vannice reported that the WTO cannot agree on a definition of what constitutes an international standard. Instead, the WTO has developed a check list that will be consulted by an arbitration panel when a challenge is raised.

Vannice reported that for CE marking officially you can either comply with a standard or you can choose to comply via a technical construction file. However, Vannice is discovering that this is not really the case. You must comply with a standard if an applicable standard exists, is what he's finding, so the apparent choice is illusory.

#### **6.2.6.5 Power quality task group**

Vannice reported that Andy Topinka's document is to be vetted by the group.

#### **6.2.7 Floors**

Tim Hansen reported that the working group is moving along. It has identified some existing standards, which the working group is now reviewing.

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

Bill Groener said that a number of TSC members and ESTA staff are having lunch Friday with some ASTC members to work on better relations.

Schoeneman said that nothing much is going on with the NFPA special effects committee (SPE-AAA)

#### **6.4 Non-profit foundation project report**

No report. Groener said this item should be omitted from future agendas until the project is actively taken up.

#### **6.5 Revenue issues with standards task force report**

No report.

#### **6.6 P&P Revision**

Ruling said that he's working on it. ANSI has revised its policies and procedures, so Ruling is evaluating what has changed and how that might affect revisions to our P&P

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

Everything was covered.

#### **7 New Business**

Groener talked about Andrea Sussman's article in favor of standards. This one was focused on dealers. The second will focus on production companies. The third will be on BSR E1.17 (ACN).

#### **8 Other business**

Roger Lattin said that his local was approached by the Genie and JLG aerial boom manufactures, which are addressing the issue of putting lights on the boom basket. These lift manufacturers have asked for a standard for the mounting equipment used to attach the lights to the baskets. Would ESTA be interested in this project? Lattin asked.

Groener reiterated that the Technical Standards Program is open to any project that falls within our scope. He suggested that the Rigging Working Group would be an appropriate working group for this project, and directed Lattin to develop a written proposal.



**9 Schedule for future meetings**

Lori Rubinstein announced that the summer meetings will be the Friday and weekend of July 13, 14, and 15.

EPWG:	Friday morning, July 13
TSC:	Friday afternoon, July 13
Rigging:	Friday night, July 13
Floors:	Saturday morning, July 14
Photometrics:	Saturday afternoon, July 14
Fog & Smoke:	Saturday night, July 14
CPWG:	Saturday morning and afternoon, July 14

There will be no January meetings in 2002. Instead, the first meetings of the year will be held in February at the USITT Conference and Stage Expo. We will then meet in late April or early May in Irving, Texas. Rubinstein urged people to book early for the USITT Conference because it is being held immediately after Mardi Gras.

**10 Adjournment**

Ted Paget moved that the meeting adjourn. The motion was seconded. The motion was accepted by acclamation. Groener declared the meeting adjourned at 16:27.

## Technical Standards Committee Membership and Contact Information at Close of Meeting

Name	Company	Parent company or Representation	Voting status
Tera Johnson	Electronic Theatre Controls, Inc.	Electronic Theatre Controls	P
Mike Wood	High End Systems Inc.	High End Systems Inc.	P
Edwin S. Kramer	IATSE, Local 1	I.A.T.S.E. Local 1	P
Larry Schoeneman	Interesting Products, Inc.	Interesting Products, Inc.	P
Mike Garl	James Thomas Engineering, Inc.	James Thomas Engineering, Inc.	P
Edward Paget	Jones & Phillips Associates, Inc.	Jones & Phillips Associates, Inc.	P
Ken Vannice	NSI Corporation	Leviton Manufacturing Co., Inc.	P
Tony Douglas-Beveridge	PLASA	PLASA	A
Tim Cox	PLASA	PLASA	P
Bill Groener	Fourth Phase New Jersey	PRG	P
Mitch Hefter	Rosco/Entertainment Technology	Rosco Laboratories	P
Frank Stewart	Specialty Tech Services	Specialty Tech Services	P
Colin Waters	TMB Associates	TMB Associates	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