Minutes
Technical Standards Committee
Friday, 26 July 2002
Dallas/Ft. Worth Airport Marriott South

Chairman: Paul Vincent; Vincent Lighting Systems; principal

Recording secretary: Karl G. Ruling, ESTA

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

Visitors: Peter Scheu; Scheu Consulting Services
Bob Luther; Lex Products
Tracy Underhill; Electronics Diversified
Doug Fleenor; Doug Fleenor Design
Scott M. Blair
Roger Lattin; IATSE Local 728
William G. Krokaugger; Mole-Richardson
R. Duane Wilson; George C. Izenour Associates
Kent Jorgensen; IATSE Local 80
Hans van der Moolen; Verlinde/Stagemaker
Arnold Tang
Michael Gonzales; Wrightson, Johnson, Haddon & Williams, Inc.
Richard D. Thompson; Thompson Associates
Baer Long; Protech Theatrical Rigging Services
Ed Clare; PERA

1 Opening remarks
Paul Vincent called the meeting to order at 13:02.

2 Attendance and membership

2.1 Taking attendance
An attendance sign-in packet made of lime-yellow and blue sheets was circulated. Visitors, as well as members, were instructed to sign in.

2.2 Welcome to visitors
Paul Vincent welcomed the visitors.

2.3 Voting body
The full voting body, including those not present, was:

Name	Company	Representing	Voting status
William Conner	Schuler & Shook Inc.	American Society of Theatre Consultants	P
Robin Crews	Wrightson, Johnson, Haddon & Williams, Inc.	American 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
Tony Douglas-Beveridge	PLASA	PLASA	A
Tim Cox	PLASA	PLASA	P
Frank Stewart	Specialty Tech Services		P
Tera Johnson	The Starfish Group		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
		Total votes	16

3 Approval of minutes from the previous meeting
Mike Garl moved that the minutes of the last meeting be accepted as written. The motion was seconded. The motion was approved with a unanimous show of hands.

4 Call for patents and anti-trust statement
Paul Vincent read the following call for patents aloud:

"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 protected intellectual property issues were brought to the attention of the assembly.

Paul Vincent then read the following anti-trust statement aloud:

"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 anti-trust issues were brought to the attention of the assembly.

5   Approval of agenda
Ken Vannice moved that the agenda be approved. The motion was seconded. The motion was accepted by a unanimous show of hands.

6   Changes in TSC leadership
Steve Terry stated that he is resigning as co-chairman of the Technical Standards Committee. He explained that having a working group chairman as one of the heads of the TSC impinges on the rights of appeal by TSP participants for actions or inactions in a working group. Therefore, he is resigning.

Terry then moved that as a matter of policy the ESTA President shall not appoint a working group chairman as a chairman of the TSC, and this plicy be added to the P&P at the earliest convenience. The motion was seconded. The motion was accepted unanimously by a show of hands.

ESTA President Mike Wood apologized for not having anticipated this problem. Paul Vincent expressed regret for not being able to work with Steve Terry. Mike Wood said he is looking for another TSC co-chair, one who is not a working group chairman.

7   Distribution of ESTA committee contact information
Lori Rubinstein distributed the contact information. No changes were noted except that Steve Terry should not be listed as the TSC co-chair.

8   Old business

8.1 Financial reports

8.1.1   Treasurer's report
Frank Stewart noted some changes to budget. In general, he moved money that had been allocated to working groups but not spent to other areas to bring the budget into balance.

8.1.2   Status of contributions and pledges
Lori Rubinstein distributed a listing of the pledges and contributions

8.1.3   Accounting of TSP documents sold and on-hand
Lori Rubinstein reported that very few hard-copies of our standards have been sold recently. However, our standards and other technical documents will be available for sale on the ANSI website soon.

8.2 Working group reports

8.2.1   Camera Cranes
Ed Clare reported on the progress of the working group. He noted that at the February TSC meeting we had set July as a date to show progress. The working group has made progress, he reported. There was a working group meeting at ShowBiz Expo at which the pictures for the camera crane handbook were discussed. Kent Jorgensen asked if it was okay for the handbook to show a picture of a camera crane touching power lines. The consensus of the TSC was yes.

Ed Clare also mentioned that the group has a proposal for the camera crane maintenance standard and a draft document

Steve Terry moved that we reafirm the charter of the CCWG. The motion was seconded. The motion was approved by a unanimous show of hands.

Ed Clare asked if Chuck Hunnegardt and he can be appointed as co-chairs. Eddie Kramer moved that Ed Clare and Charles Hunnegardt shall be appointed as CCWG co-chairs. The motion was seconded. The motion was approved by a unanimous show of hands.

8.2.2 Control Protocols

8.2.2.1 E1.11 (DMX)
Mitch Hefter reported that the document is in public review.

8.2.2.2 E1.17 (ACN)
Steve Terry reported that three ACN documents were delivered to the working group, which is very encouraging. These documents cover the Session Data Transport, Device Management Protocol, and the packet structure. The next major document should be the one that details of the Device Description Language. Terry says that Antonuk wants to ask for a public review at the LDI meeting. His expectation is for a complete protocol description by the end of the year.

8.2.2.3 E1.20 (Remote Device Management)
Scott Blair reported that the task group has a working document, and is trying to break the messaging protocol out from the transport protocol to make a cleaner presentation of the standard.

Ruling brought up the issue of what "gateway" meant in the resolution of February 2002 meeting in which the TSC voted to "direct the CPWG to work to ensure that the features of RDM and ACN be coordinated so that RDM can work as an effective ACN-DMX gateway." "Gateway" in networking means a device that allows the transfer of data without modification of the data from one physical network to another. It's use in this context would require RDM to be able to carry the full command and data set of ACN and would make RDM a DMX-version of ACN. Did the TSC intend to give the CPWG advice at this level of technical detail?

Steve Terry moved that the previous statement that RDM should be a "gateway" between ACN and DMX devices shall be clarified. The clarification shall be as follows:

> In that statement (of February 13, 2002), the term "gateway" was used in a metaphorical sense and not a technical one. It was not the TSC's intention that RDM serve as a protocol converter that allows the full ACN command and data set to be transmitted to DMX devices. It is the intention of the TSC that RDM be devised so that it will be useful for enhancing the utility of ACN networks. The technical details of this implementation are the purvue of the CPWG and its task groups.

The motion was seconded. The motion was approved by a unanimous show of hands.

8.2.3 Fog and Smoke
Larry Schoeneman reported that the working group is trying to get people to actually adopt and use our fog stewardship program. It's important for getting chemical manufacturers to allow their products to be sold to fog equipment manufacturers.

Larry noted that errors in the draft E1.5 document were found, so we're fixing that before it goes to another public review.

Schoeneman reported that the group has started work on a standard for planning and executing fog effects of all types. Ruling added that the document will provide guidance for effects technicians and will also help to reassure fire marshals so they will allow the effects to be used.

Schoeneman also reported on some projects that are not part of the Technical Standards Program but that are outgrowths of the research done for the program and that have some of the same participants. He announced that ESTA's fog testing program has been launched. Lori Rubinstein reported that there had been a positive response to Eric Tishman's presentation in San Francisco, which described the program.

Eddie Kramer reported on the fog testing done during a Seven-Eleven show at Radio City Music Hall. Mineral oil haze was monitored, but not the dry ice fog because the carbon dioxide meter has an audible alarm, which would have interfered with the event.

Schoeneman also reported that a session has been set up to have Dr. Alan Kao determine some more calibration factors for fog fluid/machine combinations that were not tested as part of the work done for the Equipment-Based Guidelines for Actors Equity.

8.2.4   Photometrics
Ruling reported that the working group would be discussing the IESNA's draft LM-73 standard for measuring the output of stage and studio luminaires. There currently is no standard for measuring the output.

8.2.5   Rigging

8.2.5.1   E1.4 – Manual Rigging Systems
Mike Garl reported that the task group has completed the comment resolutions and have a revised draft for approval of the working group. He thinks it will be approved for another public review.

8.2.5.2   E1.6 – Powered Rigging Systems
Garl reported that they had planned to have a task group meeting here today, but it didn't happen. He said that the resolutions and another draft of the standard should be ready by LDI.

8.2.5.3   E1.7 – Recommended Practice for Flying Performers
Garl reported that the public review had closed and that the task group is now working on comment resolutions.

8.2.5.4   E1.8 – Speaker Enclosures Rigging Standard
Mike Garl reported that a new revision and a new set of comment resolutions has been developed. These will be discussed at this evening's working group meeting. There are definitely more instances of "shall" than "should" in the document now, said Garl.

8.2.5.5   E1.15 – Manufacture, Assembly, and Use of Theatrical Boom & Base Assemblies
Garl reported that the working group has another version of the BSR E1.15 document to discuss.

8.2.5.6   E1.21 – Portable roof systems
Garl reported that the task group had met and divided the project up into sections for homework. People have developed sections and will meet tomorrow morning for putting them together.

8.2.5.7   E1.22 – Fire curtain systems

8.2.5.7.1 Letter to NFPA
Karl Ruling read the minutes of the last TSC meeting:
> "Ted Paget moved that we draft a letter expressing unhappiness over the delay in processing the applications of our members and the resulting lack of representation on the NFPA 80 committee, which is still proceeding with a standard that affects our industry. The motion was seconded. By show of hands the motion was approved unanimously."

Ruling noted that no one had been appointed to write the letter. He was then directed by the chairman to write the letter.

Bill Conner reported on the turmoil in the NFPA 80 committee. The committee will be expanded. Probably then the applications will be reviewed.

Conner said that NFPA 80 probably will only cover installation and maintenance. Materials and performance will have to be done by someone else in some other standard.

8.2.5.7.2 Progress on standard
Bill Conner reported that nine people of the 15 in the task group met this morning. They are working by email between meetings. Progress is being made.

8.2.5.8   E1.2 – Aluminum towers and trusses revision
Garl reported that there will be a meeting this weekend of a task group to start work on a revision of the standard.

8.2.6   Electrical Power

8.2.6.1   E1.17 - Task group on a recommended practice for selection, installation, and use of portable feeder cable.
Ken Vannice reported that the project is moving along. The task group has an outline they are working on. Many sections are written, but not polished.

8.2.6.2   E1.18 - Task group for a recommended practice for use of residual current devices in entertainment applications.
Vannice reported that there is a draft document and backup document. There is also some work being done at UL on standards for higher-trip current GFP devices. He expressed concern about the direction of the document.

8.2.6.3   E1.16 – HMI ballast power cables
Ruling reported that the document had been approved by the ESTA Board. All it needs now is ANSI approval.

8.2.6.4   EMC task group (including EMC Workshops/LFEIC report)
Vannice reported that there had been no further work on this issue since the standard ANSI C82.77-2002 was adopted. This standard is available from the NEMA website.

8.2.6.5   Pin connectors issue
Vannice said that he will write a letter to UL asking for an explanation for the lack of use of the USITT pin connector standard in the next two weeks. We need to know if it has to be an ANSI standard, or whether it can be used by UL as a USITT standard.

8.2.7   Floors
Bill Maiman reported that the working group is investigating two issues concurrently: slip and rake. Standard will probably be on the measurement criteria for these things. Floor resilience is still an issue to be worked on.

8.3   Report on liaisons to other industry groups

8.3.1   NFPA
NFPA 5000, the building code, has gone through its process and been approved reported Conner. Schoeneman reported no significant news regarding pyro and flame effects.

8.3.2   UL
No news.

8.4   Review of action items from last meeting not covered above
None.

9   New Business

Lori Rubinstein reported on Pathway Connectivity's generous offer to host a series of forums and discussion areas with archiving. Part of it would be for the TSP, but this part of the proposal raises two issues:

1. Moderate or monitor. If we moderate it, we have a greater duty of care. There also has to be a terms of use posted and enforced.
2. Archiving the issue. ANSI and our lawyers recommend not archiving stuff. Our lawyer is investigating this. He's leaning toward a purging of the records every two weeks or every month.

Steve Terry reported that the IEEE policy has been to archive on-line discussions forever, but IEEE has a new lawyer who says that the IEEE archiving policy needs to be modified and that things should not be kept forever.

There was a discussion of the length to keep the archive that would be appropriate for ESTA. Steve Terry suggested that the purge date could be at the issuing of the standard. At that point, we can condense the records to just the formal record of the proposals and responses.

Steve Terry moved that the TSC thank Pathway Connectivity for their offer and that we will consider the legal implications befor accepting it. The motion was seconded. The motion was accepted by a unanimous show of hands.

9   Other business

None.

10   Schedule for future meetings

Lori Rubinstein directed the group's attention to the printed meeting schedule, which had been distributed. She announced that changes to the schedule for LDI must be made this next week. Changes later may be impossible or prohibitively expensive. The January meetings will be here at this hotel in Ft. Worth.

Rubinstein asked for preferences on the summer meetings. They could be the weekend of July 11 through 13 or July 25 through 27. The consensus was that the later set of dates is preferable.

There was then a review of the tasks assigned at this meeting:

1. Karl Ruling shall write the query letter about the state of the applications to the NFPA 80 technical committee.

2. The TSC's intent in urging that RDM be a "gateway" between ACN and DMX devices shall be clarified to the CPWG. This will be done by Steve Terry or Karl Ruling.

3. Karl G. Ruling shall revise the P&P to include the prohibition against working group leaders serving as the leadership of the Technical Standards Committee.

4. Mike Wood shall thank Pathway Connectivity for their offer of hosted forums. He said he will do so at the ESTA Board meeting.

11   Adjournment

Paul Vincent thanked all for attending and being involved in the process.

Larry Schoeneman moved that the meeting adjourn. The motion was seconded. The motion was approved unanimously with a show of hands. Paul Vincent declared the meeting adjourned at 15:40.

Membership List and Contact Information as of 25 September 2002

Name	Company	Parent company or representation (Sort field)	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	Electronic Theatre Controls, Inc.	P
Mitch Hefter	Entertainment Technology	Genlyte Thomas Group LLC	P
Mike Wood	High End Systems Inc.	High End Systems Inc.	P
Edwin S. Kramer	I.A.T.S.E, 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	Colortran	Leviton Manufacturing Co., Inc.	P
Tim Cox	PLASA	PLASA	P
Tony Douglas-Beveridge	PLASA Standards Office	PLASA	A
Frank Stewart	Specialty Tech Services	Specialty Tech Services	P
Tera Johnson	The Starfish Group	The Starfish Group	P
Colin Waters	TMB	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	Vincent Lighting Systems	P
Eckart Steffens	SOUNDLIGHT	VPLT	A
Florian von Hofen	VPLT	VPLT	P