Chairman: Paul Vincent; Vincent Lighting Systems; P

Recording secretary: Karl G. Ruling; ESTA

Members attending: William Conner; Schuler & Shook Inc., representing the Amer. Society of Theatre Consultants; P
Robin Crews; Wrightson, Johnson, Haddon & Williams, Inc., representing the Amer. Society of Theatre Consultants; P
Steve Terry; Electronic Theatre Controls, Inc.; P
Mitch Heffter; Entertainment Technology (Genlyte Thomas Group LLC); P
Mike Wood; High End Systems Inc.; P
Larry Schoeneman; Interesting Products, Inc.; P
Steve Terry; Electronic Theatre Controls, Inc.; P
Ken Vannice; Colortran; Leviton Manufacturing Co., Inc.; P
Ron Bonner; PLASA; A (arrived at 14:49, after the roll call votes)
Mark Engel; Rosco Laboratories; P
Frank Stewart; Specialty Tech Services; P
Mike Garl; James Thomas Engineering, Inc.; P
Lori Rubinstein; ESTA; ex officio

Visitors: Roger L. Lattin; IATSE Local 728
William L. Maiman; Lex Products
Kent H. Jorgensen; IATSE Local 80
Greer Morrison; ESTA

1 Opening remarks
The meeting was called to order by Paul Vincent at 13:09. He asked all those present to turn off cell phones and beepers. He thanked all those present for investing their time in this meeting.

2 Attendance and membership

2.1 Taking attendance
A blue attendance sign-in sheet was circulated. Paul Vincent announced that we have a quorum. He announced that Eddie Kramer and Colin Waters had sent their regrets for not being able to attend.

2.2 Welcome to visitors
Paul Vincent welcomed the visitors to the meeting.

2.3 Welcome to Ron Bonner as PLASA’s alternate representative.
Paul Vincent noted that Ron Bonner was not present, but wanted to publicly welcome him anyway. Vincent announced that Bonner had been appointed as an alternate representative for PLASA. (Bonner was at a Floors Working Group meeting, and arrived at the TSC meeting shortly after the Floors Working Group meeting was adjourned.)

The consensus body during this meeting, including those not present, was
3 **Approval of minutes from the previous meeting**
Steve Terry moved that the minutes be approved as written. The motion was seconded. The motion was approved by a unanimous show of hands.

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."

Steve Terry asked Mike Wood about his success with getting a statement from Richard Belliveau offering non-prejudicial licensing rights at a reasonable fee for some of his recent patents. Wood said that he hadn’t received an assurance yet, but that he has spoken to Belliveau. Wood anticipates receiving such a statement of the availability of a non-restrictive license at reasonable terms.

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."

Karl Ruling held up some of the easy-to-read pamphlets to show their availability.

No anti-trust or restraint of trade issues were brought to the attention of the assembly.

6 Approval of agenda
Paul Vincent asked to add the following items:
   9.3 Site license policy
   9.4 Followspot position working group

Ken Vannice moved that the modified agenda be approved. The motion was seconded. The motion was approved with a unanimous show of hands.

7 Distribution of ESTA committee contact information
Lori Rubinstein distributed the committee contact information sheets. No changes to contact information were offered.

8 Old business

8.1 Financial reports

8.1.1 Treasurer's report
Frank Stewart's report was distributed.

There was a discussion of the cost of insurance. Our lawyer, David Saltiel, had recommended increasing the coverage from $1 million to $2 million, Rubinstein explained. It was very hard to find coverage that did not exclude coverage for any standard that had input, even in public review, from any licensed professional. The insurance found was expensive, but would cover our risks while allowing us to continue to develop standards with input from all affected parties.

8.1.2 Status of contributions and pledges
Lori Rubinstein reported that we are continuing to receive contributions to support the TSP. Donors have been continuing to give money to the TSP, even though they are now also donating to support the certification program.

8.1.3 Accounting of TSP documents sold and on-hand
Lori Rubinstein reported that there was no report because USITT and ANSI have not submitted any new reports.

8.2 Working group reports

8.2.1 Camera Cranes

8.2.1.1 Report on handbook vote
Ruling reported that the motion to send it to public review is being decided by a letter ballot.

8.2.1.3 BSR E1.12
Kent Jorgensen reported that at the last working group meeting the group had decided to go forward with the standard. The working group will meet at the NAB trade show and possibly at the USITT Conference.

8.2.2 Control Protocols
8.2.2.1 E1.11 (DMX)
Steve Terry reported that the task group is working on third public review comment resolutions.

Mitch Hefter, the task group leader, said that there are only a few more comments to be reviewed. He said he hopes to have it done by the March meeting.

8.2.2.2 E1.27-x (Cabling)
Steve Terry reported that the letter ballot to send it to public review is in recirculation. There had been one "No with reasons" vote.

8.2.2.3 E1.17 (ACN)
Steve Terry reported that many comments were received. Resolving them will probably require substantive changes to the document, which will trigger the need for another public review.

8.2.2.4 E1.20 (Remote Device Management)
Steve Terry reported that many comments were received. Resolving them will probably require substantive changes to the document, which will trigger the need for another public review.

8.2.3 Fog and Smoke

8.2.3.1 BSR E1.23 – General fog standard
Larry Schoeneman reported that we have another version of the document to discuss at the next F&S meeting.

8.2.3.3 Guidance document for fire alarms and fire detection systems
Greg Meeh has been working on this issue, reported Larry. The intention is to have a simple document pointing to the provisions in existing standards that will let someone specify a fire detection and alarm system that won't be susceptible to issuing false alarms when fog is used.

8.2.4 Photometrics

8.2.4.1 BSR E1.25
Karl Ruling reported that a few comments had been received during the last public review and that the working group would work on resolving them at the next meeting.

8.2.4.2 Review of data sheets attempting to conform to ANSI E1.9
Ruling reported that this project had been put on hold until there were some data sheets to review, but that ETC was attempting to comply with some of the provisions of ANSI E1.9 with their data sheets for the new Source Four Revolution.

8.2.5 Rigging

8.2.5.1 E1.1 - Wire rope ladders
Mike Garl reported that the Rigging Working Group had a motion to reaffirm this American National Standard, without any changes, but that a public review was still needed. The working group had voted with a clear supermajority to send the standard to public review. The TSC must now approve that motion.

Mike Garl moved that ANSI E1.1-1999 be sent to public review. The motion was seconded. The motion was decided by a roll call ballot, with ten of a voting body of 15 voting in favor and none against. Ron Bonner was not yet present.
8.2.5.2  E1.2 – Aluminum towers and trusses revision

Mike Garl reported that the Rigging Working Group had voted by a supermajority to send the revised revision document (Rig/2002-2019r3) to public review.

Mike Garl moved that BSR E1.2-200x (Rig/2002-2019r3) be sent to public review. The motion was seconded. The motion was approved by a supermajority, with ten of a voting body of 15 voting in favor and none against. Ron Bonner was not present during the vote.
8.2.5.3 E1.4 – Manual Rigging Systems
Garl reported that the task group is drafting suggested public review comment resolutions.

8.2.5.4 E1.6 – Powered Rigging Systems
Garl reported that the task group is drafting suggested public review comment resolutions.

8.2.5.5 E1.7 – Recommended Practice for Flying Performers
Mike Garl reported that no one at the last working group meeting offered any motions to take this project forward. Since then, the task group leader, Delbert Hall, has resigned. However, there are two people who have said that they might be interested in leading the project. We shall see at the next working group meeting (scheduled for 19:00 this evening) if there is interest in pursuing this project.

Steve Terry spoke of the need for the task group leader to have "a fire in the belly" to carry this project forward. Standards-drafting projects that are undertaken because it would be nice to have the standard but that don't arouse anyone's passionate involvement tend to waste resources and never come to fruition.

8.2.5.6 E1.8 – Speaker Enclosures Rigging Standard
Garl reported that the task group is drafting suggested public review comment resolutions.

8.2.5.7 E1.15 – Manufacture, Assembly, and Use of Theatrical Boom & Base Assemblies
Mike Garl described how the comment resolutions were revised twice and accepted twice, but that the comment resolutions and the revised document now are congruent, and the working group has voted to send the revised standard to public review.

Mike Garl moved that BSR E1.15, Entertainment Technology – Recommended Practices and Guidelines for the Assembly and Use of Theatrical Boom & Base Assemblies (Rig/1998-2032r10) be sent to public review. The motion was seconded. The motion was approved by a supermajority of ten of the TSC voting Yes. Ron Bonner was not yet present.
8.2.5.8 E1.21 – Portable roof systems
Mike Garl reported that the document BSR E1.21, Entertainment Technology — Temporary Ground-Supported Overhead Structures Used to Cover the Stage Areas and Support Equipment in the Production of Outdoor Entertainment Events (document number Rig/2002-2003r4) had passed a letter ballot in the working group for a first public review.

Mike Garl moved that BSR E1.21 be sent to public review. The motion was seconded. The motion was approved on a roll call vote, with a supermajority (10) of the committee of 15 voting in favor of the motion and none against the motion. Ron Bonner was not yet present.

8.2.5.9 E1.22 – Fire curtain systems
Bill Conner reported that the task group drafted resolutions for over 100 comments at the last set of meetings at LDI. He hopes to have the comment resolutions done for July.
8.2.5.10 Chain hoist control connectors
Mike Garl reported that the task group keeps saying they are revising the scope statement, but nothing has been submitted. If it is not submitted at this next meeting, Garl intends to remove it from the agenda. This was never formally voted to be a standards-drafting project.

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 it is coming along, in spurts. Roger Lattin and he agreed that a first draft worthy of consideration for a public review should be done by July.

8.2.6.2 E1.19 - A recommended practice for use of residual current devices in entertainment applications
Vannice reported that Bob Luther is now leading this project. The big problem is how to make GFP work reliably with minimal false tripping. Lattin said that the task group met after the EPWG meeting and specific homework tasks were assigned by Bob Luther. Vannice predicted a document for public review by October.

8.2.6.3 EMC task group (including EMC Workshops/LFEIC report)
Vannice revealed that Pierre de Saulet of Leviton in Canada is the person who managed to get the Canadian Standards Council to drop the idea of adopting IEC 61000-3-2.

Karl Ruling was directed by Paul Vincent to put this report in the liaisons section of the agenda, since reporting on EMC issues and our liaison with the Low Frequency Emissions Industry Coalition is not a working group project.

8.2.6.4 E1.24, pin connector intermateability standard
Mitch Hefter reported that a first draft of the standard should be ready for a public review vote by the working group in March 2004.

8.2.7 Floors, BSR E1.26
Ruling reported that the project's task group had started on writing a document, but that no draft or fragment of a draft had yet been submitted to the working group. There continues to be some research being done to identify existing research on floors performance parameters.

Steve Terry asked for a schedule of deliverables. Ruling could not report that a schedule was available.

Steve Terry moved that the Floors Working Group produce within the next 30 days a schedule for their project and a schedule of deliverables. The motion was seconded. The motion was approved by a unanimous show of hands.

Karl Ruling was directed to talk to Tim Hansen, the working group chairman, about the schedule for deliverables. Paul Vincent was to talk to Hansen about the need for a working group co-chair. Paul Vincent called a short recess, and Ruling and he went to visit the Floors Working Group meeting.

Paul Vincent reported that the Floors Working Group was almost finished at the New Business part of the agenda. He reported that they had had a pleasant conversation, and the group said they would comply.

Bonner, who had been at the Floors working group meeting, reported later in the TSC meeting, upon his return, that the Floors Working Group plans to have a draft of BSR E1.26 done in time for the March meeting at the USITT Conference. The research is now done, so they are ready to move forward.

8.3 Report on liaisons and news from other industry groups
8.3.1 PLASA news
Ron Bonner reported that he is having a seminar next month (February) for interested parties dealing with the new working at heights regulations. He plans to be able to feed back comments to the government on the regulations.

8.3.2 USITT news
Mitch Hefter reported that USITT has voted to give $75,000 over three years to the Certification Program.

8.3.3 ASTC news
Bill Conner reported no news.

8.3.4 VPLT news
No report by VPLT had been submitted, and no representatives were present to offer a verbal report.

8.3.5 UL liaison
Ken Vannice reported that UL is making massive changes in the operating procedures. The entertainment technology standards have been scattered to offices all over the United States, which has added the institutional memory for how to interpret these standards. He suggested that we will have to see how this works in the aggregate, as some of the negative moves are balanced by very positive ones, such as creating customer service representatives, with access to all the records on one central server, which makes them accessible from any office.

There was a discussion of UL 334, a "desk standard" for control consoles. It's not an ANSI standard or even any kind of a consensus standard, but a set of in-house rules for testing. Vannice opined that this needs to be a formal standard, and suggested that if UL fails to move forward with making it one, we can take it up as a project.

8.3.6 CANENA liaison
Ken Vannice said that there was no news to report because there had been no meeting at this round of TSP meetings. The next set of CANENA meetings will be on the Sunday and Monday after the USITT Conference.

8.3.7 NFPA liaison

8.3.7.1 NFPA 70 (NEC)
Mitch Hefter reported on the work of Code Panel 15 at recent meetings. In article 518, assembly occupancies, has a revised list of examples of the scope. The areas where plastic conduit can be used was rolled back to fewer areas. Proposals for requiring GFCI in theatres and other areas were rejected. Issues with grounding in article 525 (carnivals) are being sorted out in balloting; the consensus was not clear in the meetings. There were proposals from Disney for a new article 519 for control circuits for amusement attractions, but it needs work before it moves forward, so it is on hold until a task group writes an article for introduction in the next code cycle.

8.3.7.2 NFPA 80
Bill Conner reported that this standard deals with fire doors and windows, but that the technical committee was going to start work on writing requirements in it for fire safety curtains. Conner and Jerry Gorrell were accepted on to the committee, and there is a tentative plan to have Rod Kaiser accepted as Conner's alternate on the committee.

8.3.7.3 NFPA 101 (Life Safety Code) and 5000 (building code)
No report.
8.3.7.4 NFPA 1126 (close pyro) and 160 (flame effects)
Larry Schoeneman reported that there is a meeting scheduled for February to deal with coordination with NFPA 101 and other NFPA standards. We are interested in this because we can push for changes to deal with fire alarms and fog effects.

8.3.8 JASST – Japan Association of the Safety Staging Technology liaison
Lori Rubinstein reported that we met at LDI for 2.5 hours. They are interested in standards and how to create more standards.

8.3.9 Opera America (fog proposal)
Ruling reported that he will be presenting a long session on fog-making technology and ESTA's fog testing program at the Opera America conference in Pittsburgh, PA, June 8.

8.3.10 Infocom liaison
Rubinstein reported a discussion with the ICIA director in which he expressed an interest in developing a standard for controlling projectors. She sent him information about our standards program.

8.3.11 Technologies for Worship liaison
Rubinstein reported that ESTA has a booth at the show and that Ruling will offer two safety seminars in support of the show.

8.3.12 Certification Program liaison or news
Lori Rubinstein reported that the skills groups are working on the bodies of knowledge. The council is about ready for the RFP for the psychometricians.

Rubinstein also announced that we have hired a Director of Certification. Katie Geraghty's previous position was with the American Board of Sleep Medicine, where she worked on their certification program.

8.4 New project request form
Steve Terry moved that the revised project request form be accepted. The motion was seconded. The motion was accepted by a unanimous show of hands. The consensus was that the document shall go on the ESTA website.

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

9 New Business

9.1 Appointment of new CPWG co-chairman
The TSC had voted by email to appoint Tracy Underhill as co-chairman of the CPWG. Steve Terry introduced the new co-chair, Tracy Underhill. Terry moved that the TSC communicate to Steve Carlson its thanks for his many, many years of service to the Technical Standards Program. The motion was seconed and approved by a unanimous show of hands. The signatures on the letter shall be those of Karl Ruling, Paul Vincent, and Steve Terry. Ruling was directed to write the letter.

9.2 Appointment of a Rigging Working Group co-chairman
Mike Garl moved that the TSC appoint Bill Sapsis as co-chairman for the Rigging Working Group. The motion was seconded. The motion was approved by a unanimous show of hands.

9.3 Site license policy
There was a discussion of the request for a site license for our standards. The consensus of the group is that we have a volume sale policy, and that is enough. The response to a request for a site license shall be, "Please buy as many copies as you need."
9.4 Followspot position working group
Steve Terry moved that we accept the request as outlined on the forms and that we create a Followspot Position Working Group with Robin Crews and Jack Schmidt as co-chairmen. The motion was seconded. The motion was approved by a unanimous show of hands.

10 Other business
None.

11 Schedule for future meetings
The meeting schedule had been distributed at the beginning of the meeting. The next TSC meeting on the schedule is listed as being Wednesday, 17 March 2004, 13:00 to 17:00. The following meeting will be Friday, 16 July 2004, 13:00 to 17:00.

12 Adjournment
Mitch Hefter moved that the meeting adjourn. The motion was seconded. The motion was approved by acclamation. Paul Vincent declared the meeting adjourned at 15:45.
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