

**Minutes**  
**Technical Standards Committee**  
Wednesday, 13 February 2002  
Hyatt Regency New Orleans  
New Orleans, LA

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

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

**Members attending:** Frank Stewart; Specialty Tech Services; principal  
Larry Schoeneman; Interesting Products, Inc.; principal  
Mike Garl; James Thomas Engineering, Inc.; principal  
Colin Waters; TMB; principal  
Edward Paget; Jones & Phillips Associates, Inc.; principal  
Mike Wood; High End Systems Inc.; principal  
Ken Vannice; Colortran (Leviton Manufacturing Co., Inc.); principal  
Edwin S. Kramer; IATSE, Local 1; principal  
Tera Johnson; Chrysalis; principal  
Rodney F. Kaiser; J.R. Clancy Inc., representing USITT ; principal  
Mitch Hefter; Entertainment Technology (Genlyte Thomas Group LLC); principal  
Lori Rubinstein; ESTA; ex officio  
Bill Maiman; ESTA; ex officio

**Visitors:** William Conner; Schuler & Shook Inc., representing ASTC  
Bob Luther; Lex Products  
Arnold Tang; Arnold Tang Productions  
Ed Clare; PERA  
Roger Lattin; IATSE Local 728  
W. G. Krokaugger P.E.; Mole-Richardson  
Steve Terry; Electronic Theatre Controls

**1 Opening remarks**

Bill Groener called the meeting to order at 13:03. He welcome all to New Orleans and noted that today is the day after Mardi Gras. He told a story of a taxi driver thinking he was odd for coming to New Orleans the day after Mardi Gras.

**2 Attendance and membership**

**2.1 Taking attendance**

Bill Groener asked people to note their attendance on the multi-colored attendance sheet. He then asked those present to introduce themselves, which they did.

**2.2 Welcome to visitors**

Groener welcomed all the visitors. He explained the purpose of the meeting in case any of them were present for a USITT session and had walked into the wrong room. He stated that observers are welcome and may speak, but he cautioned that if debate drags, their right to speak may be curtailed.

Groener also described the situation with Tera Johnson. She is no longer an employee of ETC and now has her own marketing firm, Chrysalis. However, TSC members, with the exception of those serving as organizational representatives, do not serve as company representative; they serve for the particular skills they can offer the TSC and the Technical Standards Program. Tera Johnson will therefore stay on with the TSC because of the assets she brings to the table.

Groener also announced that he has asked Steve Terry to rejoin the TSC. Terry was attending this meeting, but he would not be an official member until the ESTA President with Board of Directors approval appoints him, which was expected to happen at the Board meeting Thursday, February 14.

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

Name	Company	Representing	Voting status
Tera Johnson	Chrysalis		P
Mitch Hefler	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	NSI Corporation (Leviton Manufacturing Co., Inc.)		P
Tim Cox	PLASA	PLASA	P
Tony Douglas-Beveridge	PLASA	PLASA	A
Bill Groener	Fourth Phase New Jersey (PRG)		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
		Possible votes	14

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

Ted Paget moved that the draft minutes be accepted as written. The motion was seconded. The motion was accepted by a show of hands.

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

Bill Groener read the following statement 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."

Ken Vannice reported that an appropriate patent licensing statement regarding the BSR E1.17 ACN project had been sent to Karl Ruling, the Technical Standards Manager.

Bill Groener 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."

Bill Maiman waved some of the easy-to-read pamphlets above his head to show their availability.

## **5 Approval of agenda**

Ted Paget moved that the draft agenda be accepted. The motion was seconded. The motion was approved with a show of hands..

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

Lori Rubinstein distributed a set of contact lists for various ESTA committees. Corrections were offered. Frank Stewart asked that only the tech@esta.org email address be used for him. Hefter noted that Mhefter@genlyte.com is his email address at Genlyte and is the one he can access during the workday. Groener said his fax number should be 201-868-6401.

## **7 Old business**

### **7.1 Financial reports**

#### **7.1.1 Treasurer's report**

Frank Stewart presented the budget report and an unofficial budget for 2002. It was unofficial because the Board has not approved it.

Lori Rubinstein asked that working groups tell her if AV is not required. AV equipment ordered but not used is an unnecessary expense.

#### **7.1.2 Status of contributions and pledges**

Lori Rubinstein noted that 19 new companies gave donations without being asked and ten other companies doubled or more their contribution from last year. This is remarkable.

Groener gave credit for ETC's major contribution to Steve Terry and thanked him. It was he who successfully solicited it from ETC.

Groener asked Colin Waters to head the VAT refund effort again for this year.

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

Rubinstein presented the accounting of TSP document sales. Groener noted that we will not be able to fund the TSP from standards sales. The sales do not net very much income.

### **7.2 Working group reports**

#### **7.2.1 Camera Cranes**

##### **7.2.1.1 Meeting with Ed Clare**

Ed Clare, the working group co-chair, was present and reported on the Camera Crane Working Group's progress on its projects.

The handbook is stuck in the task group, Clare reported. The illustrations remain to be done. J.L. Fisher has volunteered to have his technical writer work with the task group on polishing the text, and has donated the services of his technical illustrator. The illustrator did a first draft, but Kent Jorgensen was not that happy with it so it needs revision.

Ed Clare said that nothing has been done on BSR E1.12. He felt it is inappropriate to go forward with that project if the manual can't get finished.

Steve Terry asked who wanted this project to get done the most. Ed Clare said Kent Jorgensen.

Ted Paget asked what we should do about the ANSI standard project. Is it dead? he asked. There was a discussion of whether this manual could be turned into a standard, and Karl Ruling said that he thought it could. There was a consensus that there has to be a deliverable on the manual by the July meeting, or else we will abandon that project.

Rubinstein and Ruling reported that Ed Clare's report essentially sums up what they had learned in their meeting with him in New York.

Groener reviewed the action items: The manual needs to be finished by the July meetings, and at that time we will revisit using it as an ANSI standard.

#### **7.2.1.2 Translation of VBG SP 25.1/6**

Ruling reported that he had a machine translation that he can work into something readable.

#### **7.2.2 Control Protocols**

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

Hefter says the task group has proposed resolutions to the public review comments and a draft standards document incorporating the suggested resolutions has been written. If the draft standards document is approved, it will probably be the IEC input document.

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

Mitch Hefter read aloud Steve Carlson's emailed report:

The ACN TG is working on simplifying the Device Management Protocol and is examining the use of SLP (Service Locator Protocol) to provide the discover and service identification function in ACN. SLP is an IETF standards-track protocol and it would be very helpful if this could be used for ACN. The TG has had a conference call to discuss investigations on multicasting vs. unicasting done after the November meetings. The group felt that the conference call was a viable way to move forwards between meetings and is looking at using NetMeeting for future conferences. The meetings at USITT will unfortunately suffer from the absence of several members due to business conditions.

As always, I will be glad to go into more detail if anyone is really interested. The focus of ACN at present is to simplify the design and to pick up as much from the outside world as possible. Some of the issues we have wrestled with for several years have become mainstream and there are possible solutions that we can grab. We must also make sure that anything we do is completely compatible with IETF and existing networking practice.

Lori Rubinstein asked when there would be deliverables from this project. At the last meeting Steve Carlson had said deliverables would be available in the first quarter of 2002. It's now the first quarter of 2002. Where are the deliverables? Carlson was not present, so there was no answer.

Steve Terry observed that the current method of managing the ACN project is not being effective. We keep hearing of work being done, but there are no deliverables to the market. The market is moving on with this. There was a discussion of how to move the ACN project forward.

Bill Groener appointed a task group of Karl Ruling, Steve Terry, and Mike Wood to look into the ACN project and to get it to move forward. They are to recommend a solution back to the TSC. This could include any number of possibilities, including new task group leadership or hiring paid development staff.

Bill Groener raised the issue of Bob Goddard's letter to him complaining about market claims of "ACN-ready" and the advantages those working on the ACN project might enjoy. [The letter is appended to these minutes.]

Steve Terry asked to speak to the issue, and read a portion of an emailed statement Steve Carlson:

1. ACN is software. The hardware required to run the software is standard (Ethernet interface, CPU, memory). Any computer with the correct hardware could be labeled "ACN Ready." I am typing this on an "ACN Ready" laptop, for example.

2. Indicating readiness for a future standard is common in the tech industry. PC's, for example, had USB hardware ports before there was any software to support them. The desire is to indicate to the customer that the product is upgradeable and "future-proof." Every personal computer in the world may be upgraded by adding new software. My laptop was advertised as "Windows XP Ready" months before XP was available. Hardware may also be upgraded by the addition of expansion cards or external devices. Many networking companies are advertising "802.3af" (Power over Ethernet) compliant products now, even though the standard won't be published for months. Cisco's switches put all of the power supply electronics on daughter cards. Any Cisco switch that uses their proprietary powering scheme will be upgradeable to 802.3af power simply by a card swap. YOU can think of hundreds of examples yourself, I'm sure.

3. There is nothing that can be done to stop a company from making such claims, especially if they are not part of the "family." This sort of thing comes up all the time in IEEE. In ESTA's case "ACN" is not a trademark. E1.17 is the standard.

Ruling stated that David Saltiel, ESTA's legal counsel, had advised him that Goddard's concerns should be brought out into the open at the working group meeting and recorded in the minutes. This discussion, his letter, and the response from Steve Carlson should then be part of the public minutes.

There was a discussion in which the consensus was that Karl Ruling should write an article for Protocol addressing what "ACN-ready" and other claims mean.

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

Hefter reported that there is a 0.1 draft of the E1.20 standard that was circulated within the task group. Steve Terry asked that RDM and ACN task groups work to ensure that there is coordination so that RDM can work as an ACN-DMX gateway. He asked for a motion from the TSC to direct the CPWG to work on coordinating the two.

Ted Paget moved that the TSC shall 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. The motion was seconded. The motion was approved by a unanimous show of hands.

#### **7.2.3 Fog and Smoke**

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

Larry Schoeneman reported that he had a letter from Monona Rossol against our "mineral oil fog" standard. Ruling reported that there had been a few comments offered during the public review of BSR E1.5, and some of those are negative, but that there hadn't been the firestorm of criticism that had been expected.

##### **7.2.3.2 Sampling project**

Larry Schoeneman said the sampling project had changed into a project to have users do their own testing to make sure that they meet standards. Lori Rubinstein explained the details of this fog education outreach program and how it has been funded. The printed materials for the program are supposed to be ready by early May.

### **7.2.3.3 Product stewardship**

Larry Schoeneman moved that the three fog product stewardship documents be published. The motion was seconded. The motion was approved unanimously by a show of hands.

## **7.2.4 Photometrics**

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

Ruling reported that Jim McHugh was getting a Prometric photometric system sent to him so that he could generate some real data and plug it into some sample E1.9 forms.

### **7.2.4.2 Public information project**

Ruling reported that he has a whole list of possible topics that the working group developed. They will be turned into Protocol or other magazine articles and then compiled into a book. He said that he has a story about do-it-yourself photometrics in an upcoming issue of Stage Directions magazine.

### **7.2.4.3 IESNA photometric testing standard**

Ruling reported that we don't really know what this draft standard says yet. The draft standard has not received final approval from the IESNA. It is not a draft American National Standard, so no public review was announced in ANSI's Standards Action. No draft versions were circulated to the Photometrics Working Group.

## **7.2.5 Rigging**

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

Mike Garl reported that the public review had closed and that the comments had been sent to the document's task group and to the Rigging Working Group.

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

Mike Garl reported that the public review had closed and that the comments had been sent to the document's task group and to the Rigging Working Group.

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

Ruling reported that the document is in public review and will be until May 7.

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

Ruling reported that a proposed comment resolution document and a revised draft standard had been sent to the working group for approval or modification at this evening's meeting.

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

Mike Garl reported that the working group did not take the TSC's advise and did not vote to abandon the project. He advised people at the last meeting to meet with Richard Nix to offer help. One person did, Garl said. Eddie Kramer stated that Nix has another version of the document to offer at the working group meeting tonight.

### **7.2.5.6 Portable roof systems**

Ruling reported that Keith Bohn had a conference call with his task group and the TSM to refine the scope of the project. A better scope statement was developed during the conference call

### **7.2.5.7 Fire curtains**

We had several people apply to be on the NFPA 80 committee, stated Garl. Ted Paget said that the applicants will be selected at the May NFPA meeting.

Bill Conner says it is not certain that NFPA 80 will address the issue of fire curtains. Some text was submitted to the committee for a vote, but there had been a some clear irregularities in the committee procedure in the process.

#### **7.2.5.8 Revaluation of E1.2 standard**

Garl said that the standard will be re-examined to address problems introduced by the heat used in applying powder coating finishes.

#### **7.2.6 Electrical Power**

##### **7.2.6.1 E1.17 - Task group on a recommended practice for selection, installation, and use of portable feeder cable.**

Ken Vannice said the project is moving along – not as fast as he would like, but it's moving along.

##### **7.2.6.2 E1.18 - Task group for a recommended practice for use of residual current devices in entertainment applications.**

Vannice stated that there is an approved outline for the draft document.

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

Vannice reported that we have an approved standard in the working group: this one. It is being forwarded to the TSC for its approval. The working group recommends that it be published on the ESTA and PERA websites.

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

Vannice reported that not a lot has happened recently on the EMC front. He noted that it was recently announced that an organization of power supply producers is now working more closely with CENELEC in Europe. He felt that this should help keep the adoption of tough power line harmonics standards at the EC level under control. He also reported that the USCCEMC will have a meeting in New York. This group still wants to get EN 61000-3-2 withdrawn. It wants to get rid of the notion of horizontal standards or, failing that, weaken it.

##### **7.2.6.5 Power quality task group**

Vannice said the project was abandoned because task group was too busy to work on it. Ruling was directed to remove this item from future TSC agendas.

##### **7.2.6.6 the rules for cabling and the assumptions that are behind them project**

Ken Vannice reported that this project is an article for Protocol. He's working on his second draft.

##### **7.2.6.7 Pin connector**

Vannice stated that there are concerns about failures with 100A connectors. The mating of the male and female connectors, particularly between different brands is sometimes poor and results in overheating. There is a USITT configuration standard for pin connectors, but UL is not using it when testing connectors. However, the USITT standard, even if it were used, might not address the compatibility problems. It does not adequately address the specifications of the female, or issues such as what "reliably mate" means or how this should be measured.

Vannice said that at that at this evening's USITT engineering commission meeting they will discuss what to do with the pin connector standard, whether it needs to be revised, needs typos fixed, needs to be an ANSI standard, or what.

##### **7.2.6.8 New NEC code panel**

Eddie Kramer reported that the re-working of the NFPA 70 code panel structure has resulted in him and the motion picture people being removed from the panel. He requested that ESTA write a letter to the NFPA pointing out how important it is that a representative from labor who works in theatres be on the committee.

#### **7.2.7 Floors**

Bill Maiman reported that the working group is close to launching a formal standards document for slipperiness and energy absorption. Dealing with raked floors might be more of a problem.

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

#### **7.3.1 ASTC**

Ted Paget said that he and Bill Conner are divvying up the work of serving as ESTA-ASTC liaisons.

#### **7.3.2 NFPA**

Larry Schoeneman said that there is some interest in developing a cryogenic fog standard in the NFPA. The concern tends to be from the use of bottled gases. The F&S Working Group is going to talk about this at the meeting.

#### **7.3.3 UL**

No news, said Vannice.

### **7.4 ESTA OUI proposal**

Karl Ruling reported that it was a good idea, but it's a dead issue. Either ESTA members don't need any MAC numbers, or they already have their 16 million plus MAC addresses.

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

None.

## **8 New Business**

Bill Conner spoke about the draft Oregon stage and orchestra lift code. It's not an unreasonable project, but the draft document is attempting to apply rules that make sense for a regular passenger elevator to moving stage platforms. The Oregon Elevator Safety Program staff had sent a fax to Schuler & Shook requesting comments on the draft document, but the short deadline works against giving them well-drafted comments.

Vannice offered to write to the Oregon Elevator Safety Program to ask for more time to comment.

Ted Paget moved that the TSC shall write a letter asking to be involved in the process of drafting the code and asking for more time to respond. Ted Paget offered to draft the letter. The motion was seconded. The motion was approved unanimously by a show of hands.

Conner suggested that the Oregon Elevator Safety Program staff might be open to working on this with us as an ANSI standard.

## **9 Other business**

**9.1** Lori Rubinstein reported that ESTA has been active in fighting legislation banning mercury-containing products. She gave an overview of how the laws would restrict or outlaw the use of mercury-containing products, which would have a severe effect on metal halide lamp use. Rubinstein outlined our efforts to reach out to other groups in the entertainment business. She also described our letter-writing campaigns.

**9.2** Groener announced that he must resign the TSC due to his work commitments. He will be attending through the May meeting to ensure a smooth transition. Mitch Hefter thanked him for his work.

## **10 Schedule for future meetings**

Lori Rubinstein handed out the schedules for the TSP meetings. She noted the last minute room changes for today. The next TSC meeting will be on Friday, May 3, at 13:00 to 17:00 at the Dallas/Ft. Worth Airport Marriott South. This is a new hotel for us; it's not the old hotel that we've been going to for years.

## **11 Adjournment**

Larry Schoeneman moved that the meeting adjourn. The motion was seconded. The motion was accepted with a show of hands. Bill Groener declared the meeting adjourned at 16:25.



Date: February 4, 2002  
To: Bill Groener  
ESTA Technical Standards Committee  
c/o Fourth Phase New Jersey  
[bgroener@fourthphase.com](mailto:bgroener@fourthphase.com)

From: Bob Goddard/ Goddard Design Company  
718 599 0170  
[goddard@goddarddesign.com](mailto:goddard@goddarddesign.com)

RE: ACN "ready" claims

Dear Bill,

We are one of the firms marketing products that transmit DMX512 data via TCP/IP In the new Lighting Dimensions Industry Resources Guide, Pathway Connectivity and Strand Lighting have chosen to advertise their TCP/IP DMX nodes as "ACN Ready." They are not the only manufacturers to make such claims.

We are not comfortable advertising any of our products as "ACN Ready." We are perfectly willing to grant that our definition of "ACN Ready" may be different from some of our fellow manufacturers. In some cases maybe we should look at these claims as the standard advertizing exaggeration describing any product with an unwired RJ45 as "ACN ready." While we are not a member of the task group drafting the new standard, as members of the CPWG we are in a position to know that the standard ain't exactly finished yet. So it is a little hard to know what will be required to support it. We have found that there is considerable confusion about what ACN ready means. Potential customers at our booth at LDI2001 were under the impression that "ACN Ready" means plug and play; when the standard is implemented, the equipment they purchase now will simply "work"

It is possible that individuals drafting the standard know for certain that the equipment they are designing contains sufficient computer power and memory to handle the new standard. They may have a very accurate estimate of the time and NRE needed to develop the software to support this protocol.

This information if it exists is only available to people on the task group or people who have close working relationship with people on the task group. Using this information commercially is trading upon insider information.

Those engaged in writing the standard are in a position to manipulate the final form of the standard to suit equipment already sold, while possibly manipulating it to exclude equipment already sold by others. This raises serious anti-trust questions.

Normally the open standards policy of ESTA should lessen this. Any member of the DMX512 task group who relied on an early draft would not have gained much advantage. However there is an attitude held by some members of the task group that the standard as they submit it to the rest of the industry will be accepted as written, without comment or substantive change. I have heard a comment attributed to a member of the task group that when the protocol is sent to first public review, it's ready for manufacturers to design to. My experience as a member of the DMX512 task group leads me to feel that this sentiment is an expression of wishful thinking or extreme arrogance.

So what am I asking you to do? I feel strongly that ESTA must make clear to its members and to the industry as a whole that ACN or whatever standard is eventually derived, is a work in progress. ESTA also needs to monitor the behavior of its members, reminding us all of the potential for ethical conflicts arising from standards writing and implementation.

Sincerely  
Bob Goddard

## Membership List and Relevant Contact Information as of 4/01/2002

Name	Company	Parent company or representation (Sort field)	Voting status
Tera Johnson	Chrysalis	Chrysalis	P
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	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	Colortran	Leviton Manufacturing Co., Inc.	P
Tony Douglas-Beveridge	PLASA	PLASA	A
Tim Cox	PLASA	PLASA	P
Bill Groener	Fourth Phase New Jersey	PRG	P
Frank Stewart	Specialty Tech Services	Specialty Tech Services	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
Florian von Hofen	VPLT	VPLT	P
Eckart Steffens	SOUNDLIGHT	VPLT	A