

**Minutes**  
**Electrical Power Working Group**  
Wednesday, 19 March 2008  
Hilton Americas Houston  
Houston, Texas

**Chairmen:** Ken Vannice; Colortran (Leviton Manufacturing Co., Inc.); P; MP  
Mitch Hefter; Entertainment Technology (Royal Philips Electronics), representing USITT; P;  
U

**Recording secretary:** Karl G. Ruling

**Members attending:**

George Long; Aggreko Event Services (Aggreko); P; DR  
Arnold Tang; Arnold Tang Productions; O; G  
Steve Terry; Electronic Theatre Controls, Inc.; P; MP  
Ian Foulds; IATSE Local 873, representing the Entertainment Electrical Safety Committee of Ontario;  
P; G  
Edwin S. Kramer; I.A.T.S.E. Local 1; P; U  
Roger Lattin; I.A.T.S.E. Local 728; P; U  
Alan M. Rowe; IATSE Local 728; A; U  
Michael J. Carnaby; Mikan Theatricals; P; DR  
W. G. Krokaugger, P. E.; Mole-Richardson Co.; P; CP  
Vincent J. Cannavale; Motion Laboratories; P; CP  
Peter Herrmann; Motion Laboratories; A; CP  
David Herrmann; Motion Laboratories; A; CP (joined at this meeting)  
Ron Bonner; PLASA; P; U  
Michael Lay; Strand Lighting (Royal Philips Electronics); P; MP  
Jerry Gorrell; Theatre Safety Programs; P; U

**Visitors:** None.

**1 Opening remarks**

Mitch Hefter called the meeting to order at 09:00, and welcomed all to Houston. He commented on the severe weather, which had shut down the Dallas/Ft. Worth airport and delayed or cancelled many flights, but that had not affected Houston itself very much.

**2 Attendance and membership**

**2.1 Introduction of those present and taking attendance**

A blue attendance sign-in sheet was circulated. Those present introduced themselves, except for David Herrmann, who was introduced by his father, Peter Herrmann.

**2.2 Determination of quorum**

Mitch Hefter asked the voters to raise their hands. He counted the up-raised hands and announced that a quorum present and business could be conducted.

**2.3 Recognition of alternate voting members**

Mitch Hefter reminded those alternates who were present with their principal that only one may vote on a motion.

**2.4 Requirements for membership**

The following statement was read aloud to the assembly by Mitch Hefter:

"Membership is open to all who are affected by the work of the group. Companies that would be in the dealer/rental company interest category in particular are encouraged to become members.

Voting members are required to attend meetings and to vote on letter ballots. Voting members and their alternates may not miss three consecutive meetings without a loss of voting status."

## 2.5 Processing of new membership requests

Applications for the following had been received:

David Herrmann; Motion Laboratories; A; CP

Michael M. Lay; Strand Lighting (Royal Philips Electronics); P; MP (recognition of new company owner)

Steve Terry moved that the applications be accepted. The motion was seconded and then approved with a unanimous show of hands.

The full consensus body during this meeting, including those absent, was:

Name	Company	Representing (This is the sort field.)	Voting status	Int. cat.
James Davey	AC Power Distribution Inc.	AC Power Distribution Inc.	P	CP
Greg Mayberry	AC Power Distribution Inc.	AC Power Distribution Inc.	A	CP
George Long	Aggreko Event Services	Aggreko	P	DR
Wolfgang Hofheinz	Bender GmbH & Co. KG	Bender GmbH & Co. KG	P	MP
Joe Boardman	Bender Inc.	Bender GmbH & Co. KG	A	MP
Paul Menetrey	Bender Inc.	Bender GmbH & Co. KG	A	MP
Steve Terry	Electronic Theatre Controls	Electronic Theatre Controls, Inc.	P	MP
Elizabeth E. (Lizz) Chancellor	Elizabeth Chancellor	Elizabeth Chancellor	I	U
Ian Foulds	IATSE Local 873	Entertainment Electrical Safety Committee of Ontario	P	G
Edwin S. Kramer	I.A.T.S.E. Local 1	I.A.T.S.E. Local 1	P	U
Roger Lattin	I.A.T.S.E. Local 728	I.A.T.S.E. Local 728	P	U
R. Bruce Prochal	IATSE Local 728	I.A.T.S.E. Local 728	A	U
Patric J. Abaravich	I.A.T.S.E. Local 728	I.A.T.S.E. Local 728	A	U
Alan M. Rowe	IATSE Local 728	I.A.T.S.E. Local 728	A	U
Keith S. Woods	Lakhri Impressions Ltd.	IATSE Local 891	P	U
Simon Hunt	IATSE Local 891	IATSE Local 891	A	U
John (Javid) D. Butler	Integrated Theatre, Inc.	Integrated Theatre, Inc.	P	CP
Stephen J. Kay	K-Tec Corporation	K-Tec Corporation	P	MP
Ken Vannice	Colortran	Leviton Manufacturing Co., Inc.	P	MP
Bill Grande	Leviton Manufacturing Co., Inc.	Leviton Manufacturing Co., Inc.	A	MP
Bob Luther	Lex Products Corp.	Lex Products Corp.	P	CP
Kenneth M. Makowski	Lex Products Corp.	Lex Products Corp.	A	CP
Tyrone Mellon Jr.	Lex Products Corp.	Lex Products Corp.	A	CP
Louis Bradfield	Louis Bradfield	Louis Bradfield	I	U
Jeff deRecat	Marinco/ADI	Marinco	P	MP
William Drake	Marinco	Marinco	A	MP
Michael J. Carnaby	Mikan Theatricals	Mikan Theatricals	P	DR
W. G. Krokaugger, P. E.	Mole-Richardson Co.	Mole-Richardson Co.	P	CP
Vincent J. Cannavale	Motion Laboratories	Motion Laboratories	P	CP
Peter Herrmann	Motion Laboratories	Motion Laboratories	A	CP
David Herrmann	Motion Laboratories	Motion Laboratories	A	CP
Ron Bonner	PLASA	PLASA	P	U
Michael Lay	Strand Lighting	Royal Philips Electronics	P	MP
Michael Scudday	SSRC, Inc.	SSRC, Inc.	P	CP
Stephen Vanciel	Stephen Vanciel	Stephen Vanciel	P	U
Jerry Gorrell	Theatre Safety Programs	Theatre Safety Programs	P	U
Brett Paddor	TMB	TMB	P	MP

Name	Company	Representing (This is the sort field.)	Voting status	Int. cat.
Colin Waters	TMB	TMB	A	MP
Richard Wolpert	Union Connector Company (MO)	Union Connector Company	P	CP
Mitch Hefter	Entertainment Technology (Royal Philips Electronics)	USITT	P	U
William L. Maiman	William L. Maiman	William L. Maiman	P	U
		Total votes possible	27	
		Votes by interest categories	7	CP
			7	MP
			2	DR
			10	U
			1	G

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

See document EP/2008-7002, file EPmin01-2008.pdf.

Eddie Kramer suggested a change to one sentence in 7.3 from "He explained that he is reluctant to submit the comment resolutions without a matching revised draft standard," to "He explained that he is reluctant to submit the comment resolutions with a matching revised draft standard." Karl Ruling made the change.

Eddie Kramer moved that the minutes so revised be approved. The motion was seconded. The motion was approved with a show of hands, with one abstention and no opposition. The revised minutes is document number EP/2008-7002r1.

### 4 Reading of the call for patents

The following statement was read aloud to the assembly by Ken Vannice:

"ESTA intends not to publish any standard that contains protected intellectual property, unless that information can be licensed by anyone for a reasonable fee. ESTA uses a process of open patent and copyright disclosures to implement its intent. ESTA does not conduct patent or copyright searches and does not warrant that its standards contain no protected intellectual property.

"In keeping with the open disclosures policy, I ask if anyone present wishes to notify this working group of the existence of a patent or copyright or other intellectual property that might protect material in a standard being developed by this working group. You need not be the holder of the patent or copyright to notify this working group of its existence."

No protected intellectual property was brought to the attention of the assembly.

### 5 Reading of the anti-trust statement

The following statement was read aloud to the assembly by Ken Vannice:

"The ESTA Board of Directors, the Technical Standards Committee, and the leadership of this working group 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 TSC chair or ESTA president immediately.

"ESTA legal counsel has informed us that violations of the anti-trust laws can have serious consequences. Individuals engaged in certain unlawful conduct can be found criminally liable. An individual convicted of a criminal violation of the Sherman Act may be fined as much as \$1,000,000 and imprisoned for up to ten years. An easy to read pamphlet describing restraint of trade issues is available from the Technical Standards Manager."

Karl Ruling, the Technical Standards Manager, held up one of the easy-to-read pamphlets to show its availability.

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

## **6 Approval of agenda**

Eddie Kramer moved that the draft agenda be accepted. The motion was seconded and then approved with a show of hands.

## **7 Old business**

### **7.1 EMC task group**

Ken Vannice had no report. Ron Bonner also had no news about EMC regulatory or standards activity in Europe.

### **7.2 ANSI E1.16-2002 (R2007)**

No news or action needed.

### **7.3 BSR E1.18 portable feeder cable selection and use**

#### **7.3.1 BSR E1.18-1**

Ruling said that the public review motion for BSR E1.18-1 is on the TSC's meeting agenda. No other action was taken on it at this working group meeting.

#### **7.3.2 BSR E1.18-2**

Eddie Kramer submitted a new part of the suite, BSR E1.18-2, a glossary document.

Steve Terry spoke about the purpose of the glossary. It could be a definitions document for only the 18 suite, or it could be a general glossary for the entire entertainment power technical field. If it is the latter, Terry suggests that it be a stand-alone standard. Jerry Gorrell described an ASSE fall protection document that is a set of definitions for the suite of fall protection documents. The definitions document is free; the other standards have to be bought. Vannice pointed out that E1.18-1 has a definitions section and said that we can't have conflicting definitions. Kramer said that the words that are listed in both documents have the same definitions. Kramer said that the 18-2 document has the definitions for words we are using in 18-1 and some more useful definitions.

Steve Terry moved that we defer any public review of 18-2 until more work is done on the other suite of documents. The motion was seconded. The motion was accepted by a show hands, with all voting in favor, but with one abstention.

Kramer asked if there would be support for a document dealing with the busbars inside a rack, since when a rack has inputs and outputs, the internal busbars become part of the power distribution system that is the subject of the E1.18 suite. Terry said that this needs to be in a UL standard, perhaps UL 1640, but not one of our documents. There was extended discussion of the problem of equipment being used as part of the distribution system that has lower internal ampacity than the feeder cable or the overcurrent protection for the circuit. Karl Ruling suggested that clause 5.2.4 in the draft E1.18-1 (EP/2002-7003r11) addresses this problem. There was further discussion of the problems of equipment that is has lost its ampacity labeling or that was never labeled, and stupid people who don't read the labels when the labels exist.

The consensus was that further work on 18 would not be on a section dealing with internal busbars. What would be the next section of the suite? There was no consensus. Mitch Heffer suggested that Eddie Kramer develop a set of proposals for further development of the E1.18 suite.

### **7.4 BSR E1.19 GFCI**

Ruling said that the public review motion for BSR E1.19 is on the TSC's meeting agenda. No other action was taken on it at this working group meeting.

## 7.5 ANSI E1.24-2006, pin connectors

No news or action needed.

## 7.6 BSR E1.32 luminaire inspection guidance

A set of comment resolutions (EP/2008-7004) and a revised draft standard (EP/2006-7016r3) had been submitted to the working group. Gorrell said that the comments had made the draft standard a better document. He moved that the resolutions be accepted and that the revised draft standard be offered for public review. A roll call ballot on the motion was conducted, with the following result:

Name	Company	Representing (This is the sort field.)	Voting status	Int. cat.	Yes	No	Abstain
James Davey	AC Power Distribution Inc.	AC Power Distribution Inc.	P	CP			
Greg Mayberry	AC Power Distribution Inc.	AC Power Distribution Inc.	A	CP			
George Long	Aggreko Event Services	Aggreko	P	DR	X		
Wolfgang Hofheinz	Bender GmbH & Co. KG	Bender GmbH & Co. KG	P	MP			
Joe Boardman	Bender Inc.	Bender GmbH & Co. KG	A	MP			
Paul Menetrey	Bender Inc.	Bender GmbH & Co. KG	A	MP			
Steve Terry	Electronic Theatre Controls	Electronic Theatre Controls, Inc.	P	MP	X		
Elizabeth E. (Lizz) Chancellor	Elizabeth Chancellor	Elizabeth Chancellor	I	U			
Ian Foulds	IATSE Local 873	Entertainment Electrical Safety Committee of Ontario	P	G	X		
Edwin S. Kramer	I.A.T.S.E. Local 1	I.A.T.S.E. Local 1	P	U		X	
Roger Lattin	I.A.T.S.E. Local 728	I.A.T.S.E. Local 728	P	U	X		
R. Bruce Prochal	IATSE Local 728	I.A.T.S.E. Local 728	A	U			
Patric J. Abaravich	I.A.T.S.E. Local 728	I.A.T.S.E. Local 728	A	U			
Alan M. Rowe	IATSE Local 728	I.A.T.S.E. Local 728	A	U			
Keith S. Woods	Lakhri Impressions Ltd.	IATSE Local 891	P	U			
Simon Hunt	IATSE Local 891	IATSE Local 891	A	U			
John (Javid) D. Butler	Integrated Theatre, Inc.	Integrated Theatre, Inc.	P	CP			
Stephen J. Kay	K-Tec Corporation	K-Tec Corporation	P	MP			
Ken Vannice	Colortran	Leviton Manufacturing Co., Inc.	P	MP	X		
Bill Grande	Leviton Manufacturing Co., Inc.	Leviton Manufacturing Co., Inc.	A	MP			
Bob Luther	Lex Products Corp.	Lex Products Corp.	P	CP			
Kenneth M. Makowski	Lex Products Corp.	Lex Products Corp.	A	CP			
Tyrone Mellon Jr.	Lex Products Corp.	Lex Products Corp.	A	CP			
Louis Bradfield	Louis Bradfield	Louis Bradfield	I	U			
Jeff deRecat	Marinco/ADI	Marinco	P	MP			
William Drake	Marinco	Marinco	A	MP			
Michael J. Carnaby	Mikan Theatricals	Mikan Theatricals	P	DR	X		
W. G. Krokaugger, P. E.	Mole-Richardson Co.	Mole-Richardson Co.	P	CP	X		
Vincent J. Cannavale	Motion Laboratories	Motion Laboratories	P	CP			
Peter Herrmann	Motion Laboratories	Motion Laboratories	A	CP	X		
David Herrmann	Motion Laboratories	Motion Laboratories	A	CP			
Ron Bonner	PLASA	PLASA	P	U	X		
Michael Lay	Strand Lighting	Royal Philips Electronics	P	MP	X		
Michael Scudday	SSRC, Inc.	SSRC, Inc.	P	CP			
Stephen Vanciel	Stephen Vanciel	Stephen Vanciel	P	U			
Jerry Gorrell	Theatre Safety Programs	Theatre Safety Programs	P	U	X		
Brett Paddor	TMB	TMB	P	MP			
Colin Waters	TMB	TMB	A	MP			
Richard Wolpert	Union Connector Company (MO)	Union Connector Company	P	CP			
Mitch Hefter	Entertainment Technology (Royal Philips Electronics)	USITT	P	U	X		
William L. Maiman	William L. Maiman	William L. Maiman	P	U			
		Total		27	12	1	
		Votes by interest category	CP	7	2		
			MP	7	3		
			DR	2	2		
			U	10	4	1	
			G	1	1		

The majority of votes cast were Yes, but the motion failed to achieve the supermajority needed to move the documents forward because too few people were present. A supermajority would require a Yes from the majority of the entire voting body, which would be 14 for the EPWG. Only 13 voters were present, so it was impossible to pass a motion requiring a supermajority with a roll call ballot at the meeting.

Steve Terry moved that we send a letter ballot to the voters not present and that the final vote be the total of the roll call ballot and the letter ballot. The motion was seconded and then approved with a show of hands, with 12 voting in favor and one voting No.

Eddie Kramer was asked his reasons for voting No in the roll call vote on the resolution document and the public review motion. He stated that his reasons were that

- 1) The standard is not necessary.
- 2) The standard does not address semi-permanently installed equipment well. The document would require annual inspections, and he would like less frequent inspections.

There was extended discussion of Kramer's objections. After the discussion Ruling asked if anyone wished to change his vote. No one did.

Ruling said that he would send the draft minutes with Kramer's reasons to those not present so that those voting by letter ballot could consider them. Also, the reasons for any negative votes from the letter ballot will be recirculated to the voters at this meeting, so they can consider them.

#### **7.7 Multi-conductor cable study group report**

There was no report from the study group. A task group meeting had been requested for this evening, but the task group leader, Tyrone Mellon, would not be present because of the weather-related travel problems noted by Mitch Hefter at the beginning of the meeting.

Despite the lack of a report there was a discussion of the problems with multi-conductor cables.

#### **8 New business**

None.

#### **9 Other business**

**9.1** Ian Foulds distributed copies of the newest Ontario guidelines for electrical safety, the *Television, Film, Live Performance and Event Electrical Guidelines*.

**9.2** Bonner announced that the revised BS 7909 will be available soon for public review. This is a standard for temporary power distribution systems in the entertainment industry. Copies will be made available.

**9.3** Roger Lattin offered copies of the latest UL "white book" the list of UL standards. They will be available when his luggage arrives.

**9.4** The call for interest in the USITT NEC Committee was announced.

#### **10 Changes to observer status**

##### **10.1 Notice to the working group of those who missed three letter ballots**

None now.

##### **10.2 Members in danger of losing voting status because of excessive absence**

Members who have missed the previous two meetings and who will not have met the minimum attendance requirements if this meeting is missed:

George Long; Aggreko  
Michael Lay; Strand Lighting (Royal Philips Electronics)  
Brett Paddor and Colin Waters; TMB

Long and Lay were present. The TMB representatives were not present. Hefter announced that the TMB representatives are now observer members due to their lack of participation.

**11 Schedule for future meetings**

It was announced that the next meeting will be on Saturday, July 19, from 14:00 to 17:00 at Pace University in Manhattan.

**12 Adjournment**

Eddie Kramer moved that the meeting adjourn. The motion was seconded and then approved with a unanimous by show of hands. Mitch Hefter announced that the meeting was adjourned at 11:14.

## Working Group Membership and Contact Information as of 22 April 2008

Name	Company	Representing (This is the sort field.)	Voting status	Int. cat.
James Davey	AC Power Distribution Inc.	AC Power Distribution Inc.	P	CP
Greg Mayberry	AC Power Distribution Inc.	AC Power Distribution Inc.	A	CP
Andre Broucke	ADB - TTV Technologies	ADB-TTV Group	O	MP
George Long	Aggreko Event Services	Aggreko	P	DR
Kenny Delahoussaye	Aggreko	Aggreko	O	DR
Brian Merriken	Airpax Corporation	Airpax Corporation	O	MP
Richard L. Eberth Jr.	North Shore Safety	Airpax Corporation	O	MP
Mike Skinner	CBS Studio Center	Alliance of Motion Picture and Television Producers	O	U
Arnold Tang	Arnold Tang Productions	Arnold Tang Productions	O	G
Jiantong Wu	Beijing Special Engineering Design & Research Institute	Beijing Special Engineering Design & Research Institute	O	G
Wolfgang Hofheinz	Bender GmbH & Co. KG	Bender GmbH & Co. KG	P	MP
Joe Boardman	Bender Inc.	Bender GmbH & Co. KG	A	MP
Paul Menetrey	Bender Inc.	Bender GmbH & Co. KG	A	MP
Lee J. Bloch	Bloch Design Group, Inc.	Bloch Design Group, Inc.	O	G
Marty Lazarus	Chicago Spotlight, Inc.	Chicago Spotlight, Inc.	O	DR
Eric Bouchard	Cirque du Soleil	Cirque du Soleil	O	CP
Julie Rogers	City of Phoenix Civic Plaza	City of Phoenix	O	G
Wayne Kowalski	Coleman Cable Inc.	Coleman Cable Inc.	O	MP
Ford Sellers	Cornell University	Cornell University	O	U
Don Earl	Earl Girls, Inc.	Earl Girls, Inc.	O	DR
Steve Terry	Electronic Theatre Controls	Electronic Theatre Controls, Inc.	P	MP
Elizabeth E. (Lizz) Chancellor	Elizabeth Chancellor	Elizabeth Chancellor	I	U
Ian Foulds	IATSE Local 873	Entertainment Electrical Safety Committee of Ontario	P	G
Art Wanuch	Robertson Electric Wholesale	Entertainment Electrical Safety Committee of Ontario	O	G
Trevor Forrest	Helvar Lighting Control	Helvar Lighting Control	O	MP
Pat Miller	Hubbell Wiring Devices	Hubbell Inc.	O	MP
Edwin S. Kramer	I.A.T.S.E. Local 1	I.A.T.S.E. Local 1	P	U
Roger Lattin	I.A.T.S.E. Local 728	I.A.T.S.E. Local 728	P	U
Alan M. Rowe	IATSE Local 728	I.A.T.S.E. Local 728	A	U
Patric J. Abaravich	I.A.T.S.E. Local 728	I.A.T.S.E. Local 728	A	U
R. Bruce Prochal	IATSE Local 728	I.A.T.S.E. Local 728	A	U
Keith S. Woods	Lakhri Impressions Ltd.	IATSE Local 891	P	U
Simon Hunt	IATSE Local 891	IATSE Local 891	A	U
Gian Carlo C. Bartolotti	Ibeam SP / Banco de Eventos	Ibeam SP / Banco de Eventos	O	U
John (Javid) D. Butler	Integrated Theatre, Inc.	Integrated Theatre, Inc.	P	CP
David Murray	IPC Resistors Inc.	IPC Resistors Inc.	O	CP
Stephen J. Kay	K-Tec Corporation	K-Tec Corporation	P	MP
Jose J. Flores	Kino Flo, Inc.	Kino Flo, Inc.	O	MP
Ken Vannice	Colortran	Leviton Manufacturing Co., Inc.	P	MP
Bill Grande	Leviton Manufacturing Co., Inc.	Leviton Manufacturing Co., Inc.	A	MP
Bob Luther	Lex Products Corp.	Lex Products Corp.	P	CP
Reinhold Luther	Lex Products Corp.	Lex Products Corp.	O	CP
Kenneth M. Makowski	Lex Products Corp.	Lex Products Corp.	A	CP
Tyrone Mellon Jr.	Lex Products Corp.	Lex Products Corp.	A	CP
Louis Bradfield	Louis Bradfield	Louis Bradfield	I	U
Jim Holladay	Luxence	Luxence	O	G
Jeff deRecat	Marinco/ADI	Marinco	P	MP
Phil Fram	Marinco	Marinco	O	MP
William Drake	Marinco	Marinco	A	MP
Hiroshi Kita	Marumo Electric Co., Ltd.	Marumo Electric Co., Ltd.	O	MP
Michael J. Carnaby	Mikan Theatricals	Mikan Theatricals	P	DR
W. G. Krokaugger, P. E.	Mole-Richardson Co.	Mole-Richardson Co.	P	CP
Vincent J. Cannavale	Motion Laboratories	Motion Laboratories	P	CP
David Herrmann	Motion Laboratories	Motion Laboratories	A	CP
Peter Herrmann	Motion Laboratories	Motion Laboratories	A	CP
Marsha DuBois	Pintech Stage Connectors, Inc.	Pintech Stage Connectors, Inc.	O	CP
Steve DuBois	Pintech Stage Connectors, Inc.	Pintech Stage Connectors, Inc.	O	CP
Ron Bonner	PLASA	PLASA	P	U
James Eade	PLASA	PLASA	O	G



Name	Company	Representing (This is the sort field.)	Voting status	Int. cat.
Mac Perkins	PNTA Inc.	PNTA Inc.	O	G
Paul F. Mardon	Pulsar Ltd.	Pulsar Ltd.	O	MP
Douglas Franz	QVC Network	QVC Network	O	U
Eric Tishman	Rosco Laboratories	Rosco Laboratories	O	MP
Richard B. Glickman	Gliconen Corporation	Rosco Laboratories	O	MP
Michael Lay	Strand Lighting	Royal Philips Electronics	P	MP
Jeremy B. Collins	Selecon	Selecon	O	MP
Robert Barbagallo	Solotech Inc.	Solotech Inc.	O	DR
Michael Scudday	SSRC, Inc.	SSRC, Inc.	P	CP
Stephen Vanciel	Stephen Vanciel	Stephen Vanciel	P	U
Reuben Goldberg	Technic Services	Technic Services	O	U
Jerry Gorrell	Theatre Safety Programs	Theatre Safety Programs	P	U
Brett Paddor	TMB	TMB	O	MP
Colin Waters	TMB	TMB	O	MP
Richard Wolpert	Union Connector Company (MO)	Union Connector Company	P	CP
Mitch Hefter	Entertainment Technology (Royal Philips Electronics)	USITT	P	U
Eckart Steffens	SOUNDLIGHT	VPLT	O	G
William L. Maiman	William L. Maiman	William L. Maiman	P	U

**Key to codes:**

P	principal voting member	MP	mass-market producer interest category
A	alternate voting member	CP	custom-market producer interest category
I	individual voting member	DR	dealer or rental company interest category
O	observer, non-voting	U	user interest category
		G	general-interest interest category