

Minutes
Fog and Smoke Working Group
Saturday, 15 July 2000
Dallas/Ft. Worth Marriott Hotel
Irving, Texas

Chairman: Larry Schoeneman; Interesting Products, Inc.; principal; producer

Recording secretary: Karl G. Ruling

Members attending: Adrian Segeren; Le Maitre Special Effects; principal; producer
Bill Hektner; USITT Vice Commissioner for Smoke and Fog Safety (USITT);
principal; general interest
Mike Wood; High End Systems; principal; producer
Tim Cox; PLASA; principal; general interest
Edwin S. Kramer; IATSE, Local 1; principal; user
M. Brad Dittmer; Downhome Productions - Springfield, MO; principal; user (joined at
this meeting)
Jerry Gorrell; Theatre Safety Programs; observer; general interest

Visitors: Jeff de Recat; Advanced Devices
W. G. Krokaugger; Mole-Richardson

1 Opening remarks

Larry Schoeneman called the meeting to order at 7:03 p.m.

2 Attendance and membership

2.1 Introductions of those present

Those present, as noted above, introduced themselves.

2.2 Determination of quorum (4 needed)

Schoeneman took a quick count of those present and announced that we have a quorum.

2.3 Recognition of alternate voting members

No alternates were present.

2.4 Requirements for membership

Schoeneman reminded the group that membership is open to all who are affected by the work of the group, but that voting members are required to attend meetings. Except for organizational members, a member's voting status will be changed to observer if he misses two consecutive meetings, pending that member's attendance at another meeting.

2.5 Processing of new membership applications

Brad Dittmer had changed employers and applied for membership representing Downhome Productions. Schoeneman asked for the sense of the group on accepting his application. His application was accepted by acclamation.

2.6 Processing of changes to observer status

None.

The voting membership for this meeting was thus:

Name	Company	Parent Co./Org Represented	Vot. Stat.	Int. Cat.
Gary Fails	City Theatrical, Inc.	City Theatrical, Inc.	P	P
M. Brad Dittmer	Downhome Productions - Springfield, MO	Downhome Productions	P	U
Mike Wood	High End Systems	High End Systems	P	P

Lowell Fowler	High End Systems	High End Systems	A	P
Byron Ziegler	High End Systems	High End Systems	A	P
Edwin S. Kramer	IATSE, Local 1	I.A.T.S.E. Local 1	P	U
Larry Schoeneman	Interesting Products, Inc.	Interesting Products, Inc.	P	P
Adrian Segeren	Le Maitre Special Effects	Le Maitre Special Effects	P	P
Randy Segeren	Le Maitre Special Effects	Le Maitre Special Effects	A	P
Marc Gingras	MDG Fog Generators Ltd.	MDG Fog Generators Ltd.	P	P
Martin Michaud	MDG Fog Generators Ltd.	MDG Fog Generators Ltd.	A	P
Tim Cox	PLASA	PLASA	P	G
Tony Douglas-Beveridge	PLASA	PLASA	A	G
Jim Gill	Reel EFX, Inc.	Reel EFX	P	P
Martin Becker	Reel EFX, Inc.	Reel EFX	A	P
Eric Tishman	Rosco Laboratories	Rosco Laboratories	P	P
Dan Faulkner	Rosco/Entertainment Technology	Rosco Laboratories	A	P
Bill Hektner	USITT	USITT	P	G
Florian Von Hofen	VPLT	VPLT	P	G
Eckart Steffens	SOUNDLIGHT	VPLT	A	G
Gunther Schaidt	Safex Chemie	VPLT	A	P

3 Approval of minutes from the previous meeting

Bill Hektner moved that the minutes be approved as written. The motion was seconded. The motion was accepted unanimously on a show of hands.

4 Approval of Agenda

Bill Hektner moved that the agenda be approved. The motion was seconded. The motion was accepted unanimously on a show of hands.

5 Call for patents

Schoeneman read the following:

"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 working group of the existence of a patent or copyright that might protect material in a standard being developed by the working group. You need not be the holder of the patent or copyright in order to notify the working group of its existence. "

No one identified any patent or copyright issues.

6 Anti-Trust Statement

Schoeneman read the following:

"The ESTA Board of Directors, the Technical Standards Committee, and the leadership of this Working Group will reject or nullify any actions that restrain trade. Anyone who feels that an action restraining trade is being or has been taken is requested to bring the matter to the attention of the chair immediately. Anyone who feels that actions in restraint of trade have been taken and not properly annulled is requested to notify the TSC chair or ESTA president immediately."

"ESTA legal counsel has informed us that any member of this working group may be found individually liable for any action that restrains trade taken by this working group. An individual convicted of a violation of the Sherman Act may be fined as much as \$100,000 and be imprisoned for up to three years. An easy to read pamphlet describing restraint of trade is available from the Technical Standards Committee."

No anti-trust issues were identified by the assembled group.

7 Task Group Reports

7.1 Fog standard E1.5

Karl Ruling reported that the ACGIH group that would take up our project has not met yet, so there is no response. He had called administrative assistant Cathi Sander at The Science Group to ask what was

up, and found that the group only meets twice a year. They will have a meeting in the late summer, but it's not that late in the summer yet. The standards-drafting process takes at least 2 years with the ACGIH, and commences with a survey of the literature – which should be helped by our CIH reports.

Mike Wood said he had come up with a similar story by contacting Dr. Kehrer, who contacted ACGIH committee member James Bus. He found out that the committee will meet by conference call in late July, and face to face in September.

7.2 Fog machine instruction manual standard

Eric Tishman was not present to give a report, but the document had been sent to the group. The working group edited the document with major changes being made to the following points:

In the "2 Purpose" section a sentence was added to encourage the use of the standard to create manuals that would support a product stewardship program. The intent of this change was to encourage people to develop product stewardship programs. Ruling also moved the description of why the standard was needed from the Scope to the Purpose.

The "3.3 Public Warnings" section was changed to a "Public Notifications" section, and the "warning" words were deleted. This was done partially to address the comments of ABTT, who felt that fog machines should either pose so low a risk to the public that no warnings are needed, or should not be used. It was the sense of the group that fog machines pose an extremely low risk to the public, so, to accommodate ABTT's comment, no warnings should be used. It was also done to address the concerns that Jerry Gorrell had about the specific meaning of "warning," particularly as this word is used by health and safety officers here in the United States.

Gorrell pointed out that 29 CFR 1910.145, "Specifications for accident prevention signs and tags," identifies specific levels of risks to employees, and mandates particular signs or tags that are to be used to alert employees to these risks. "Danger tags" are for major hazard situations where an immediate hazard presents a threat of death or serious injury to employees. "Caution tags" are to be used in minor hazard situations where a non-immediate or potential hazard or unsafe practice presents a lesser threat of employee injury. 1910.145(f)(7) states that warning tags may be used to represent a hazard level between "Caution" and "Danger. It was the sense of the group that the risks to workers, performers, and the public posed by simple exposure to the fog is virtually nil -- certainly lower than the risk level identified by the word "caution." All we are trying to do is to suggest how a fog equipment manufacture might suggest that people be notified of possible exposure to the fog. Therefore, neither the word "warning" nor the word "caution" should be used in this section.

The list in 3.3 of people who might be exposed to the fog was expanded to address some of the concerns of ABTT.

It was decided that the hazards listed in the 3.2 section are real hazards but are below the "danger" level described in 29 CFR 1910.145. Therefore, the use of the word "warning" is appropriate.

Eddie Kramer moved that the document be sent to public review. Mike Wood seconded the motion. The ballot will be by letter to allow working group members time to review the newly edited document.

7.3 Responsible Product Stewardship Program

Ruling reported that the product stewardship program was adopted by the TSC. The project launch will be at LDI, but it will be primed by articles in LD and Protocol, said Mike Wood.

7.4 Data collection task group

7.4.1 Results so far

Mike Wood reported that some sampling had been done locally to High End Systems, and that the results of some more samplings are coming in.

7.4.2 Sample journal format

Done. Mike Wood has one.

7.4.2 Scheduling other tests

Mike Wood said he has run out of time and resources to manage this project. He can't do the administration, but he said that Frank Stewart had volunteered to do it. His job will be a matter of scheduling and not handling equipment.

A call for volunteers was issued. Adrian Segeren of Le Maitre, Larry Schoeneman of Interesting Products, and Eddie Kramer of IATSE Local 1 volunteered, and Wood said that Eric Tishman of Rosco had volunteered. The intention is to have these people sample a number of venues each within 2000.

8 Old Business

None.

9 Liaison Reports

9.1 PLASA

Tim Cox reported that there are new slightly lower standards in UK for ethylene glycol. Ethylene glycol is not one of the preferred glycols, being more toxic than those that are used by the major manufacturers, but it is often used as a benchmark for toxicity.

9.2 JATET

Schoeneman reported no news.

9.3 VPLT

No report from Von Hofen or Steffens.

9.4 The Kramer and Fails Report

Kramer reported that there are requirements in NYC for some kind of licensing for handling liquid nitrogen.

9.5 NFPA

Schoeneman reported that in the recent cycle of revisions to NFPA 1126 (pyrotechnics) and 160 (flame effects) a few changes were made to 1126 and none to 160. The comments on 1126 that were accepted in principle have resulted in the addition of a definition for "flammable" ("A combustible that is capable of easily being ignited and rapidly consumed by fire. Flammables may be solids, liquids, or gases exhibiting these qualities.") and the addition of a requirement for pyrotechnic effects operators. That is, the existing paragraph 6.2.2 will have an additional sentence stating that the pyrotechnic operator shall be responsible for selecting equipment and materials that are compatible.

10 New business

LDI 2000 Dog & Pony Show plans

Karl Ruling outlined the things we can present:

- The response of the ACGIH.
- The new product stewardship program. This could use the Power Point presentation.
- The public review of the equipment manual standard.
- Third edition of the Introduction to Modern Atmospheric Effects.
- The glycol sampling project.

Ruling asked for volunteers. Larry Schoeneman, Mike Wood, and Brad Dittmer agreed. The consensus of the group was that Marc Gingras should participate, although he was not at the meeting to give his consent. Ruling says he will be asked.

11 Other business

None.

12 Schedule for future meetings

Schoeneman announced that the next meeting will be Saturday, October 21, at 6:30 p.m. at Harrah's Las Vegas. The following meeting will be January 20, 2001 at 7:00 p.m. in Irving, Texas at the Dallas/Ft. Worth Airport Marriott.

13 Adjournment

Bill Hektner moved we adjourn. The motion was seconded. The motion was approved unanimously by acclimation at 8:44 p.m.

F&S Working Group Post-Meeting Membership

Name	Company	Parent Co./Org Represented	Vot. Stat.	Int. Cat.
Murray Gellatly	A.C. Lighting Ltd.	A.C. Lighting Ltd.	O	G
Patrick O'Rourke	Big Apple Lights	Big Apple Lights	O	U
Gary Crawford	C.I.T.C.	C.I.T.C.	O	P
Gary Fails	City Theatrical, Inc.	City Theatrical, Inc.	P	P
M. Brad Dittmer	Downhome Productions - Springfield, MO	Downhome Productions	P	U
Norman Wright	Group One	Group One	O	P
Mike Wood	High End Systems	High End Systems	P	P
Lowell Fowler	High End Systems	High End Systems	A	P
Byron Ziegler	High End Systems	High End Systems	A	P
Edwin S. Kramer	IATSE, Local 1	I.A.T.S.E. Local 1	P	U
Larry Schoeneman	Interesting Products, Inc.	Interesting Products, Inc.	P	P
Jack Suesse	J.R. Clancy, Inc. (NC)	J.R. Clancy, Inc.	O	G
Greg Meeh	Jauchem & Meeh, Inc.	Jauchem & Meeh, Inc.	O	U
Patrick Boyd	Jauchem & Meeh, Inc.	Jauchem & Meeh, Inc.	O	U
Adrian Segeren	Le Maitre Special Effects	Le Maitre Special Effects	P	P
Randy Segeren	Le Maitre Special Effects	Le Maitre Special Effects	A	P
Jon Petts	Jem Smoke Machine Co, Ltd.	Martin Professional A/S	O	P
F. Lee Iwanski	Four Star Lighting	Matthews Studio Group Companies	O	U
Marc Gingras	MDG Fog Generators Ltd.	MDG Fog Generators Ltd.	P	P
Martin Michaud	MDG Fog Generators Ltd.	MDG Fog Generators Ltd.	A	P

Name	Company	Parent Co./Org Represented	Vot. Stat.	Int. Cat.
Monona Rossol	Monona Rossol	Monona Rossol	O	G
Kent H. Jorgensen	MPS Grips, Local 80	MPS Grips, Local 80	O	G
Tony Douglas-Beveridge	PLASA Standards Office	PLASA	A	G
Tim Cox	PLASA	PLASA	P	G
George Sabbi	PRG Lighting Group	PRG	O	U
Robert Barbagallo	Proximo Inc.	Proximo Inc.	O	U
Jim Gill	Reel EFX, Inc.	Reel EFX	P	P
Martin Becker	Reel EFX, Inc.	Reel EFX	A	P
Eric Tishman	Rosco Laboratories	Rosco Laboratories	P	P
Dan Faulkner	Rosco/Entertainment Technology	Rosco Laboratories	A	P
Heinz Siller	RST Präsentationssysteme	RST Präsentationssysteme	O	G
Beverly Huggins	SFX Design, Inc.	SFX Design, Inc.	O	P
Nathan Kahn	Theatre Effects, Inc.	Theatre Effects, Inc.	O	P
Jerry Gorrell	Theatre Safety Programs	Theatre Safety Programs	O	G
Thomas Costello	TJC and Associates	TJC and Associates	O	G
Colin Waters	TMB Associates	TMB Associates	O	G
James F. Foley	UCISCO, Inc.	UCISCO, Inc.	O	P
Rob Schneider	University of Arizona, Department Of Theatre	University of Arizona, Department Of Theatre	O	U
Bill Hektner	USITT Vice Commissioner for Smoke and Fog Safety	USITT	P	G

Name	Company	Parent Co./Org Represented	Vot. Stat.	Int. Cat.
Florian Von Hofen	VPLT	VPLT	P	G
Eckart Steffens	SOUNDLIGHT	VPLT	A	G
Gunther Schaidt	Safex Chemie	VPLT	A	P
Michael Zilz	Zilz International GmbH	Zilz International GmbH	O	G

Voting Status

- P Principal voting representative for a company or organization
- A Alternate voting representative for a company or organization
- I Individual representing no organization other than himself or herself
- O Observer; non-voting

Interest Categories

- P Producer (manufacturer) of fog or smoke effects
- U User of fog or smoke effects
- G General interest