

Minutes
Fog and Smoke Working Group
21 October 2000
Harrah's Las Vegas
Las Vegas, NV

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

Recording secretary: Karl G. Ruling, ESTA

Members attending: Gary Fails; City Theatrical, Inc.; principal; producer
M. Brad Dittmer; Downhome Productions; principal; user
Greg Meeh; Jauchem & Meeh, Inc.; observer; user
Adrian Segeren; Le Maitre Special Effects; principal; producer
F. Lee Iwanski; Four Star Lighting (Matthews Studio Group Companies); observer;
user
Mike Wood; High End Systems; principal, producer (came late)
Tim Cox; PLASA; principal; general interest
Martin Becker; Reel EFX, Inc.; alternate; producer
Eric Tishman; Rosco Laboratories; principal; producer
James F. Foley; UCISCO, Inc.; observer; producer
Bill Hektner; USITT; principal; general interest
Florian von Hofen; VPLT; principal; general interest

1 Opening remarks

Larry Schoeneman called the meeting to order precisely at the scheduled 18:30.
Schoeneman welcomed everyone to the meeting.

2 Attendance and membership

2.1 Introductions of those present

Schoeneman asked those present to introduce themselves. They did so, proceeding around the hollow square table in a counter-clockwise direction.

2.2 Determination of quorum (4 needed)

Schoeneman noted that there were nine voting members present at this point in the meeting, so there was a quorum and the meeting could proceed.

2.3 Recognition of alternate voting members

Martin Becker was the only alternate voting member present, and he comes so often that he seems like the principal for Reel EFX. There were no cases of a voting entity having both a principal and alternate present, so there was no need to remind the group that only one may vote.

2.4 Requirements for membership

Schoeneman reminded those attending that voting members need to attend. 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

Paul Edwards had applied to represent the Production Resource Group as a principal in the user category. Edwards was not present, however. Brad Dittmer moved that we accept Paul Edwards as an observer rather than as a principal, because voting members are required to attend meetings and he was absent. The motion was seconded. The motion was approved unanimously by a show of hands.

2.6 Processing of changes to observer status

There were no changes to observer status due to lack of attendance at this meeting.

Thus, the voting body for this meeting was:

Name	Company	Parent Co./Org Represented	Vot. Stat.	Int. Cat.
Gary Falls	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
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
			12	7 Producers 2 Users 3 Gen. int.

3 Approval of minutes from the previous meeting

Brad Dittmer moved that the minutes be accepted as written. The motion was seconded. The motion was accepted unanimously by a show of hands.

4 Approval of agenda

The following additions were suggested by the assembly:

- Add "Death by fog" under "Other business."
- Under "New business" add "Floors working group."
- Under "Other business" add "New chair."

Tim Cox moved that the agenda be accepted with these additions. The motion was seconded. The motion was accepted unanimously by a show of hands.

5 Call for patents

Larry Schoeneman read the following 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 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 issues were identified by the assembly.

6 Anti-trust statement

Larry Schoeneman read the following aloud:

"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 issues were identified by the group.

7 Task Group Reports

7.1 Fog standard E1.5

Ruling and Wood both reported that the July meeting at which the ACGIH should have discussed our request was cancelled due to bad weather in the Chicago area. The ACGIH committee that would take up our request is scheduled to meet in October, after this F&S Working Group meeting.

7.2 Fog machine instruction manual standard

Ruling reported that it's in public review. There was a discussion of how to encourage people to comment on it. Ruling was urged to publicize the public review on the Stagecraft Mailing List.

7.3 Responsible Product Stewardship Program

Wood reported that the program has been launched as an ESTA-wide program. The program had been featured in the afternoon's *Clouds and Mists* program at LDI.

7.4 Data collection task group

Ruling reported that Frank Stewart wants to know what to do with the data that was collected in Branson, MO. The consensus was that it should be sent to Karl Ruling.

Martin Becker reported that the unions in LA are conducting air sampling. Becker was asked if they would share data. He said he would ask. He identified Local 44 as one union he knew was doing air sampling.

There was a discussion of scents. Becker suggested that we should start work on standards for scents. Becker was directed to collect data on what scents are available and where they are being used.

8 Old Business

None.

9 Liaison Reports

9.1 PLASA

Tim Cox mentioned the death of the woman in Surrey who had an asthma attack in fog. Cox said that Mike Wood has a better report of what happened.

Cox reported that the HSE is revisiting the standards for mineral oil in metal working. PLASA is watching this.

9.2 JATET

Schoeneman had nothing to report, and directed Karl Ruling to strike this item from future agendas, since there has not been anything to report on this in over five years.

9.3 VPLT

Florian von Hofen reported that there was no news from Germany.

9.4 The Kramer and Fails Report

Gary Fails reported that in The Full Monty an actor refused to perform in a glycol fog, so it was removed from a cue. He also reported that the safety of liquid nitrogen was now being questioned by some in the Broadway community since there was a reported death of a hospital technician from a leak of liquid nitrogen used to cool an MRI machine. Schoeneman said that this was not an example of the dangers of nitrogen – it was an example of the dangers of poorly maintained equipment – and that it was not really relevant to properly maintained atmospheric effects machines.

9.5 NFPA

Schoeneman reported that several proposals Monona Rossol had made to make NFPA 160 cover substances in the air were rejected at the NFPA meeting in Florida.

10 New business

Floors Working Group

Greg Meeh expressed his concern about fog interests being represented on the new Floors Working Group. He suggested that this F&S Working Group should have input into that working group since atmospheric effects can affect the slipperiness of a performance floor.

Ruling pointed out that Tim Cox and Jerry Gorrell are voting members on both working groups and that they are more than 1/3rd of the voting body on the Floors Working Group. He suggested that there was little risk of the working groups operating at cross purposes or in ignorance of each other with this representation.

11 Other business

11.1 Larry Schoeneman announced that Brad Dittmer is the new co-chair of the F&S Working Group. Dittmer was congratulated.

11.2 Eric Tishman reported that the Equity/League study is done. It is specific about the types of performers they looked at. In general, there are no problems, except for those who are exposed to high concentrations. The effects are some drying of the upper respiratory tract, but they are transitory, and not career threatening. Equity and The League are now working toward setting ceiling levels, reputedly 40 mg/m³ for glycol and 25 mg/m³ for oil.

Mike Wood confirmed the above and distributed an email message from Dr. Alan Kao of Environ that specified the proposed ceiling levels. Mike also reported on the work that Dr. Kao is doing in the High End Systems demo room to quantify the concentrations one can expect to get from machines now on the market at various distances. There was concern expressed in the working group that this will result in a de facto approved list. The working group would like the protocol published so that manufacturers or others could do whatever was necessary to conduct the tests that will result in being able to give users guidance on how to use the machines or measure the output so that the ceiling limits set by Equity and the League are not exceeded.

By consensus Ruling was directed to contact Dr. Alan Kao to point out that there are a wide number of machines used and available, and that more are coming on the market all the time. If the intention of the testing is to qualify particular machines for use on stages, we would be happier if there were a procedure developed and published so that other machines can be qualified in the future.

11.3 Death by fog

Mike Wood distributed printouts of Evening Standard, Daily Express, and Kingston Guardian/Surrey Comet web pages describing the death of Joanna Smith at a Kingston nightclub on September 3, 1999. The 19-year-old student had run out to the club, then called "Volts," after breathing fog from a glycol machine. She suffered an asthma attack, lost consciousness out on the street, and died – some reports say in the ambulance and some say four days later. Medical aid was delayed in reaching Smith because the night club's bouncer refused to call an ambulance. Medical aid finally was summoned

when a passerby dialed 999. The Fulham Coroner's Court ruled that the death was from natural causes, and did not blame the fog machine. However, the owners of the club, First Leisure Corporation, was fined £2,500 for operating an unlicensed fog machine.

Exactly what kind of machine was being used at the club is unclear from the reports Wood distributed. All mention the fog being made of a mixture of glycol and water, but one also calls it a dry ice fog and reports that Dr. Philip Ind testified at the coroner's court on the possibility of dry ice triggering an asthma attack.

There was a general discussion of the incident. Working group members were disturbed to hear about it, but felt that that the death was probably due to the severe asthma, as the court had ruled, exacerbated by Smith's panic and the lack of medical attention in the early stages of the attack.

12 Schedule for future meetings

Schoeneman announced that the next meeting will be on Saturday, January 20, 2001 at 7:00 p.m. at the Dallas/Ft. Worth Airport Marriott in Irving, Texas. He noted that the Floors Working Group meeting is at 1:00 in the afternoon.

[NOTE: SINCE THIS ANNOUNCEMENT, THE JANUARY F&S MEETING IN TEXAS HAS BEEN CANCELLED. THE F&S WORKING GROUP WILL MEET NEXT BY CONFERENCE CALL, WITH THE MAJOR ITEM OF BUSINESS BEING THE DISPOSITION OF THE COMMENTS ON BSR E1.14. THE TIME AND DATE OF THAT CALL WILL BE ANNOUNCED.]

Schoeneman noted that the meeting at the USITT Conference is scheduled for the evening of Friday, March 23. That will be in Long Beach, California.

13 Adjournment

Bill Hektner moved that the meeting adjourn. The motion was seconded. The motion was accepted unanimously on a voice vote. Schoeneman declared the meeting adjourned at 19:47.

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	Downhome Productions	P	U
Norman Wright	Group One	Group One	O	P
Mike Wood	High End Systems Inc.	High End Systems Inc.	P	P
Lowell Fowler	High End Systems Inc.	High End Systems Inc.	A	P
Byron Ziegler	High End Systems Inc.	High End Systems Inc.	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.	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
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
Monona Rossol	Monona Rossol	Monona Rossol	O	G
Kent H. Jorgensen	MPS Grips, Local 80	MPS Grips, Local 80	O	G
Tim Cox	PLASA	PLASA	P	G

Name	Company	Parent Co./Org Represented	Vot. Stat.	Int. Cat.
Tony Douglas-Beveridge	PLASA	PLASA	A	G
George Sabbi	PRG Lighting and Audio Group	PRG	O	U
Paul Edwards	Fourth Phase New Jersey	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	USITT	P	G
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