

Minutes Fog and Smoke Working Group

Friday, 18 March 2005
Fairmont Royal York Hotel
Toronto, ON, Canada

Chairman: Larry Schoeneman; Interesting Products, Inc.; P; CP

Recording secretary: Karl G. Ruling; ESTA

Members attending: Dennis King; Alliance of Motion Picture and Television Producers; P; G
M. Brad Dittmer; Downhome Productions; P; U
Edwin S. Kramer; I.A.T.S.E. Local 1; P; U
Timothy Wade; IATSE Local 600; P; U
Adrian Segeren; Le Maitre Special Effects; P; MP
Martin Michaud; MDG Fog Generators Ltd.; P; MP
Mike Wood; Mike Wood Consulting LLC; P; G
Ron Bonner; PLASA; P; G
Eric Tishman; Rosco Laboratories; P; MP

Visitors: None

1 Opening remarks

Larry Schoeneman welcomed all to Canada at 08:34.

2 Attendance and membership

2.1 Introductions of those present

There were no visitors and all present knew each other, so there were no introductions.

2.2 Determination of quorum

Larry Schoeneman announced that a quorum was present. Enough voters were present to pass a supermajority vote.

2.3 Recognition of alternate voting members

There were none to recognize.

2.4 Requirements for membership

Schoeneman reminded the assembly that working group membership is open to all who are affected by the work of the group. Voting members must vote on letter ballots and attend meetings. A member's voting status will be changed to observer if he and his alternate miss three consecutive meetings. This will be done at the beginning of the third meeting missed. There is no longer an exemption for organizational members. Reinstatement of voting status may be requested at the next meeting attended.

2.5 Processing of new membership applications

There were none to process.

2.6 Processing of changes to observer status if this meeting is missed

The following voting member has missed at least the last two consecutive meetings and will be moved to observer status if this meeting is also missed:

Martin Michaud; MDG Fog Generators

Eric Tishman; Rosco Laboratories

Both were present, so there were no changes in voting status.

The working group's consensus body during this meeting, including those not present, was:

Name	Company	Representing	Voting status	Interest category
Dennis King	AMPTP	Alliance of Motion Picture and Television Producers	P	G
M. Brad Dittmer	Downhome Productions	Downhome Productions	P	U
Edwin S. Kramer	I.A.T.S.E. Local 1	I.A.T.S.E. Local 1	P	U
Timothy Wade	IATSE Local 600	I.A.T.S.E. Local 600	P	U
Larry Schoeneman	Interesting Products, Inc.	Interesting Products, Inc.	P	CP
Greg Meeh	Jauchem & Meeh, Inc.	Jauchem & Meeh, Inc.	P	DR
Patrick Boyd	Jauchem & Meeh, Inc.	Jauchem & Meeh, Inc.	A	DR
Adrian Segeren	Le Maitre Special Effects	Le Maitre Special Effects	P	MP
Don Phillips	Le Maitre Special Effects	Le Maitre Special Effects	A	MP
Martin Michaud	MDG Fog Generators Ltd.	MDG Fog Generators Ltd.	P	MP
Mike Wood	Mike Wood Consulting LLC	Mike Wood Consulting LLC	P	G
Ron Bonner	PLASA	PLASA	P	G
Eric Tishman	Rosco Laboratories	Rosco Laboratories	P	MP
Bill Hektner	USITT	USITT	P	G
		Total votes	12	
		Votes by interest category	3	MP
			1	CP
			1	DR
			3	U
			4	G

3 Approval of minutes from the previous meeting

Brad Dittmer moved that the draft minutes of the October 2004 meeting be approved as written. The motion was seconded and approved by a voice vote.

4 Approval of agenda

Eddie Kramer asked that we discuss using fog machines in anti-mold applications under other business.

Brad Dittmer moved that agenda so modified be adopted. The motion was seconded and then approved by a unanimous show of hands.

5 Reading of the call for patents

Schoeneman read the following statement aloud to the assembly:

"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.

6 Reading of the anti-trust statement

Schoeneman read the following statement aloud to the assembly:

"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 held up some copies of the easy-to-read pamphlets to show their availability.

No anti-trust issues brought to the attention of the assembly.

7 Task group and committee reports and business

7.1 TSC

Larry Schoeneman gave a brief report on the actions and reports in the TSC meeting that might be of interest to F&S Working Group members.

7.1.1 Lori is in dialog with ETL/Intertech to offer lower rates, and prioritized services to ESTA members in exchange for promotion of ETL to ESTA members.

There was a discussion of the experiences members have had with UL and ETL. There was also the suggestion that ESTA might want to approach TÜV for a competitive bid.

7.1.2 There was a discussion of what standards are used to safety test fog machines. Eric Tishman reported his company's history with testing machines by UL. He reported that about two years ago UL had informed him that they were going to discontinue listing fog machines, and that this decision was based on an outdated, erroneous, MSDS for the fluid published by another fog company. Eric Tishman got that MSDS issue sorted out, but UL is apparently still not interested in listing fog machines, simply as a business decision, given the costs of properly investigating what would be the appropriate standards for these machines and the possible revenue.

Many of Rosco's machines are listed by ETL. ETL has asked Rosco for money to buy the UL standards for testing fog machines, but Eric saw a problem in this now, since there is not a single standard for fog machines, just a listing of what other standards UL uses, and since UL is abandoning fog machines, there isn't even that now. So, the ETL listing might go away.

There was a discussion of how we might proceed to develop a standard or some other document that would give guidance on what safety standards are appropriate for fog machines.

Mike Wood was asked to contact ETL to see if they would use and list using a standard or some other document that we would generate through the ANSI process that would give guidance on what safety standards are appropriate for fog machines. He agreed.

7.2 BSR E1.23, generic fog effect guidance

7.2.1 Report on public review comments and reasons

The public review comments and reasons were reported in document F&S/2005-3001, along with proposed resolutions.

7.2.2 Consideration of proposed resolutions and revised draft standard

Mike Wood moved that the proposed resolutions in document F&S/2005-3001 be accepted. The motion was seconded. The motion was approved by a unanimous by show of hands. With ten out of a voting body of 12 present, this was a supermajority voting in favor.

Mike Wood moved that the revised E1.23 (F&S/2002-3014r8) be accepted as a fair implementation of the resolutions and offered for another public review. The motion was seconded. The motion was approved on a roll call ballot with a supermajority of 10 out of 12 voting in favor. (All present voted Yes.)

Name	Company	Representing	Voting status	Interest category	Yes	No	Abstain
Dennis King	AMPTP	Alliance of Motion Picture and Television Producers	P	G	X		
M. Brad Dittmer	Downhome Productions	Downhome Productions	P	U	X		
Edwin S. Kramer	I.A.T.S.E. Local 1	I.A.T.S.E. Local 1	P	U	X		
Timothy Wade	IATSE Local 600	I.A.T.S.E. Local 600	P	U	X		
Larry Schoeneman	Interesting Products, Inc.	Interesting Products, Inc.	P	CP	X		
Greg Meeh	Jauchem & Meeh, Inc.	Jauchem & Meeh, Inc.	P	DR			
Patrick Boyd	Jauchem & Meeh, Inc.	Jauchem & Meeh, Inc.	A	DR			
Adrian Segeren	Le Maitre Special Effects	Le Maitre Special Effects	P	MP	X		
Don Phillips	Le Maitre Special Effects	Le Maitre Special Effects	A	MP			
Martin Michaud	MDG Fog Generators Ltd.	MDG Fog Generators Ltd.	P	MP	X		
Mike Wood	Mike Wood Consulting LLC	Mike Wood Consulting LLC	P	G	X		
Ron Bonner	PLASA	PLASA	P	G	X		
Eric Tishman	Rosco Laboratories	Rosco Laboratories	P	MP	X		
Bill Hektner		USITT	P	G			
Total votes			12		10	0	0
Votes cast by interest category			3	MP	3	0	0
			1	CP	1	0	0
			1	DR	0	0	0
			3	U	3	0	0
			4	G	3	0	0

7.3 Introduction revision

7.3.1 Report on the public review

Ruling reported that no votes of any kind were received during the public review. There were no comments received.

7.3.2 Consideration of the next step

Mike Wood moved that we publish the revised *Introduction to Modern Atmospheric Effects* (F&S/1999-3007r9). The motion was seconded. The motion was accepted by a supermajority on a roll call ballot.

Name	Company	Representing	Voting status	Interest category	Yes	No	Abstain
Dennis King	AMPTP	Alliance of Motion Picture and Television Producers	P	G	X		
M. Brad Dittmer	Downhome Productions	Downhome Productions	P	U	X		
Edwin S. Kramer	I.A.T.S.E. Local 1	I.A.T.S.E. Local 1	P	U	X		
Timothy Wade	IATSE Local 600	I.A.T.S.E. Local 600	P	U	X		
Larry Schoeneman	Interesting Products, Inc.	Interesting Products, Inc.	P	CP	X		
Greg Meeh	Jauchem & Meeh, Inc.	Jauchem & Meeh, Inc.	P	DR			
Patrick Boyd	Jauchem & Meeh, Inc.	Jauchem & Meeh, Inc.	A	DR			
Adrian Segeren	Le Maitre Special Effects	Le Maitre Special Effects	P	MP	X		
Don Phillips	Le Maitre Special Effects	Le Maitre Special Effects	A	MP			

Name	Company	Representing	Voting status	Interest category	Yes	No	Abstain
Martin Michaud	MDG Fog Generators Ltd.	MDG Fog Generators Ltd.	P	MP	X		
Mike Wood	Mike Wood Consulting LLC	Mike Wood Consulting LLC	P	G	X		
Ron Bonner	PLASA	PLASA	P	G	X		
Eric Tishman	Rosco Laboratories	Rosco Laboratories	P	MP	X		
Bill Hektner		USITT	P	G			
		Total votes	12		10	0	0
		Votes cast by interest category	3	MP	3	0	0
			1	CP	1	0	0
			1	DR	0	0	0
			3	U	3	0	0
			4	G	3	0	0

8 Old Business

There was no old business.

9 New business

There was no new business.

10 Other business — Fog machines in anti-mold applications

Eddie Kramer reported that there has been some research on fog and decontamination of fungus-infected environments. He directed the group to the IAQM Orange Coast website at <http://www.decontaminate.net/decon.html>, where it states:

Why is a fog delivery system important? Until recently, it was assumed that in the indoor environment, human exposure to mycotoxins resulted from the inhalation of spores and spore-sized mycelia fragments. It has since been established that particles as small as 0.3 microns are released from colonies growing on building materials with up to 300 hundred-fold higher concentration of particles compared to spores.

Fog (an aerosol with particulate sizes ranging from 1-30 microns) is particularly effective in the decontamination of areas where foams or sprays would be difficult, if not impossible, to reach. Since mold spores range in size from 3-20 microns, the use of fog ensures that decontaminant will reach all surfaces where contaminants may have settled.

It should be noted that the fog used contains a proprietary anti-fungicide. It is not a common theatrical fog fluid, but it is still interesting to see that artificial fog has practical uses besides stage effects.

11 Liaison Reports

11.1 PLASA — Ron Bonner

Bonner reported that the HSE will change the way occupational exposure standards are assigned, and get rid of the two-tier system and bring it to one-tier.

11.2 VPLT — Von Hofen or Steffens

No VPLT representatives were present. Es gibt kein Bericht.

11.3 NFPA – Schoeneman

Schoeneman reported that the language about fire alarms suggesting alarm delays to allow incident investigation will be implemented in some of the NFPA standards. This should help reduce the incidence of false alarms.

12 Schedule for future meetings

Ruling announced that the next meeting is scheduled for Saturday, July 30, at the Dallas/Ft. Worth Airport Marriott South in Ft. Worth, Texas.

This meeting may be cancelled if there is no business. The main items of business are likely to be comment resolutions for E1.23 (the r8 version) and a report from Mike Wood regarding the willingness of ETL to use and list to a document we prepare.

The working group expressed an interest in moving the LDI meeting to start at 9:00.

13 Adjournment

Martin Michaud moved that the meeting adjourn. The motion was seconded. The motion was approved on a voice vote. Larry Schoeneman declared the meeting adjourned at 09:32.

Working Group Members and Contact Information as of 31 March 2005

Name	Company	Representing (This is the primary sort field.)	Voting status	Int. cat.
Murray Gellatly	A.C. Lighting Ltd.	A.C. Lighting Ltd.	O	DR
Dennis King	AMPTP	Alliance of Motion Picture and Television Producers	P	G
Patrick O'Rourke	Big Apple Lights	Big Apple Lights	O	DR
F. Lee Iwanski	Big Apple Lights	Big Apple Lights	O	DR
Gary Crawford	C I T C	C I T C	O	MP
Gary Fails	City Theatrical, Inc.	City Theatrical, Inc.	O	MP
M. Brad Dittmer	Downhome Productions	Downhome Productions	P	U
Norman Wright	Group One Ltd.	Group One	O	DR
Lowell Fowler	High End Systems Inc.	High End Systems Inc.	O	MP
Edwin S. Kramer	I.A.T.S.E. Local 1	I.A.T.S.E. Local 1	P	U
Timothy Wade	IATSE Local 600	I.A.T.S.E. Local 600	P	U
Kent H. Jorgensen	IATSE Local 80	IATSE Local 80	O	G
Larry Schoeneman	Interesting Products, Inc.	Interesting Products, Inc.	P	CP
Jack Suesse	J.R. Clancy, Inc. (NC)	J.R. Clancy, Inc.	O	G
Greg Meeh	Jauchem & Meeh, Inc.	Jauchem & Meeh, Inc.	P	DR
Patrick Boyd	Jauchem & Meeh, Inc.	Jauchem & Meeh, Inc.	A	DR
Adrian Segeren	Le Maitre Special Effects	Le Maitre Special Effects	P	MP
Don Phillips	Le Maitre Special Effects	Le Maitre Special Effects	A	MP
Nathan Kahn	Look Solutions USA Ltd.	Look Solutions USA Ltd.	O	MP
Martin Michaud	MDG Fog Generators Ltd.	MDG Fog Generators Ltd.	P	MP
Mike Wood	Mike Wood Consulting LLC	Mike Wood Consulting LLC	P	G
Monona Rossol	Arts, Crafts & Theater Safety	Monona Rossol	O	G
Ron Bonner	PLASA	PLASA	P	G
Douglas Franz	QVC Network	QVC Network	O	U
Jim Gill	Reel EFX, Inc.	Reel EFX	O	MP
Eric Tishman	Rosco Laboratories	Rosco Laboratories	P	MP
Heinz Siller	RST Prsentations-systeme	RST Prsentationssysteme	O	G
Beverly Huggins	SFX Design, Inc.	SFX Design, Inc.	O	MP
Robert Barbagallo	Solotech Inc.	Solotech Inc.	O	U
Stephen Vanciel	Stephen Vanciel	Stephen Vanciel	O	U
Reuben Goldberg	Technic Services	Technic Services	O	U
Jerry Gorrell	Theatre Safety Programs	Theatre Safety Programs	O	G
Thomas Costello	TJC and Associates	TJC and Associates	O	G
Colin Waters	TMB	TMB	O	G
James F. Foley	UCISCO, Inc.	UCISCO, Inc.	O	MP
Thomas V. Korder	Krannert Center for the Performing Arts	University of Illinois	O	U
Peggy Lee Martindale	University of Texas, Austin	University of Texas, Austin	O	G
Bill Hektner	USITT	USITT	P	G
Florian von Hofen	VPLT	VPLT	O	G
Eckart Steffens	SOUNDLIGHT	VPLT	O	G
Gunther Schaidt	Safex Chemie	VPLT	O	G
Mark Elliott	Walt Disney Company	Walt Disney Company	O	U
Michael Zilz	Zilz International GmbH	Zilz International GmbH	O	G

Key to codes:

- P principal voting member
- A alternate voting member
- I individual voting member
- O observer, non-voting

- MP mass-market producer interest category
- CP custom-market producer interest category
- DR dealer or rental company interest category
- U user interest category
- G general-interest interest category