

Minutes
Fog & Smoke Working Group
Monday 17 January 2022
via WebEx
11:00 – 13:00 EST (UTC -5 hours)

Chairperson:

Mike Wood; Mike Wood Consulting LLC

Recording Secretaries:

Karl Ruling and Richard Nix (ESTA)

Attendees:

Edwin S. Kramer; I.A.T.S.E. Local 1; P; DE
Stephen Vanciel; Stephen Vanciel; P; DE
Mike Wood; Mike Wood Consulting LLC; P; G
Joseph Kapp; WSP USA Corp.; I; G
Paul Jordan; NBC Universal; O; U
Mike Skinner; Contract Services Administration Trust Fund; A; U

1 Opening Remarks

Mike Wood began the meeting at 11:00, welcoming everyone and thanking them for taking time to attend.

2 Patent and anti-trust statements

2.1 Reading of the anti-trust statement

Mike Wood read the following statement aloud to the assembly:

ESTA and its members take seriously their obligation to comply with all applicable antitrust laws. Therefore, during this meeting and during all ESTA events, all discussions will be limited to those subjects that are permitted by the antitrust laws. All members should refrain from any discussion or mention of competitively sensitive subjects such as the current or future prices charged for any member product or services, current or future marketing plans or strategies, and current or future costs, including employee salaries. There also must be no agreement on the suppliers or customers that members will or will not do business with or the markets in which members will conduct business.

Violations of the antitrust laws can have serious consequences. If you have any questions or concerns about anything that is discussed at an ESTA meeting, please bring your concern to ESTA management. An easy to read pamphlet describing the antitrust laws is available from the ESTA staff.

Karl Ruling held up the pamphlet in front of his camera for attendees to see.

2.2 Reading of the call for patents

Mike Wood 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, patent application, copyright, or other protected 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.

There was nothing reported.

3 Attendance and Membership

3.1 Requirements for membership

Mike Wood read the following statement aloud to the assembly:

Membership is open to all parties who are affected by the work of the group; membership in ESTA is not a requirement, but there is a \$100/person/year participation fee to help fund the costs of running the Technical Standards Program. Voting members are required to attend meetings and vote on letter ballots. Any principal member and alternate that both miss three consecutive meetings or that miss three consecutive letter ballots will have their membership status changed to observer. This action will be taken at the beginning of the first meeting after such inaction and will be recorded in the minutes of that meeting.

3.2 Introduction of attendees

The group of attendees was small, and everyone knew everyone else.

3.3 Determination of a quorum

Karl Ruling declared that a quorum was present.

3.4 Changes to observer status for inactivity

These people have missed the last two meetings and will become observers if this meeting is also missed.

Brad Dittmer; Stage Labor of the Ozarks; User

Marnie Styles; Ultratec Special Effects; MP (Don Phillips was at a meeting in April 2021. He is now retired.

Neither were present, so their status was changed to observer accordingly.

3.5 Processing of new membership and status change requests

Stephen Vanciel; Stephen Vanciel; P; DE (change of representation and interest category)

Joe Kapps moved to accept the change of representation application. The motion was seconded, and carried without objection or abstentions.

3.6 The consensus body

Name	Representing	Status	Int Cat
Keith Sklar	Actors' Equity Association	P	G
Clark James	Alliance of Special Effects and Pyrotechnic Operators (ASEPO)	P	U
Mona Shum	Aura Health and Safety Corporation	I	U
Matthew Antonucci	Contract Services Administration Trust Fund	P	U
Chris Moulton	Contract Services Administration Trust Fund	A	U
Mike Skinner	Contract Services Administration Trust Fund	A	U
Edwin S. Kramer	I.A.T.S.E. Local 1	P	DE
Mike Wood	Mike Wood Consulting LLC	P	G
Daniel Ayers	StageRight Services LLC	P	DE
Stephen Vanciel	Stephen Vanciel	P	DE
Karl G. Ruling	Unit 12 Productions	I	CP
Joseph Kapp	WSP USA Corp.	I	G
	Total votes possible	10	
Custom market producer	Votes by interest category	1	CP
Designer		2	DE

Dealer/Rental company		0	DR
General interest		3	G
Mass marker producer		0	MP
User		4	U

4 Approval of the minutes from the last meeting

[See FSmin09-2021_DRAFTTr1.pdf]

Stephen Vanciel moved to approve the minutes as submitted. The motion was seconded and carried without objection or abstentions.

5 Approval of agenda

Joseph Kapp moved to approve the agenda. The motion was seconded and carried without objection or abstentions.

6 Old Business

6.1 ANSI E1.5 – 2009 (R2018), Entertainment Technology - Theatrical Fog Made with Aqueous Solutions of Di- and Trihydric Alcohols (Reaffirmation, revision, or withdrawal by 29 November 2023)

No news or action.

6.2 ANSI E1.14 - 2018, Entertainment Technology—Recommendations for Inclusions in Fog Equipment Manuals (Revise, reaffirm, or withdraw by 27 February, 2023).

No news or action now.

6.3 ANSI E1.23 - 2020, Entertainment Technology - Design and Execution of Theatrical Fog Effects

(Revise, reaffirm, or withdraw by 2025)

No news or action.

6.4 ANSI E1.29 – 2009 (R2018), Product Safety Standard for Theatrical Fog Generators that Create Aerosols of Water, Aqueous Solutions of Glycol or Glycerin, or Aerosols of Highly Refined Alkane Mineral Oil (Reaffirmation, revision, or withdrawal by 06 November 2023)

No news or action.

6.5 ANSI E1.40 – 2016 (R2021), Recommendations For the Planning of Theatrical Dust Effects

(Reaffirmation, revision, or withdrawal by 9 September 2026)

No news or action.

6.6 BSR E1.74 – 202x, Indoor Stage Ventilation

Task group: Keith Sklar (leader), Mona Shum, Mike Skinner, and Clark James.

Progress report.

No report from the task group but there was discussion.

Karl Ruling gave a short dissertation about how shows are now open, and that many people are busy opening shows. He said that he has been to venues where he can now feel the air moving, whereas he had previously felt no air movement. He has noticed the big, refrigerator-sized boxes in the corner that don't seem to be connected to anything, but are likely recirculating and cleaning the airspace. He said he has been thinking about this, and thinks it needs to be a risk assessment, primarily, that he has a lot of ideas, but doesn't want to write the document. Mike Wood asked if he would write his notes down as an outline of sorts for the task group's benefit. Karl agreed to do so.

Mike Skinner joined the meeting, and further described what is happening in the industry. He said that achieving the number of room air turnovers (as many as six per hour) renders the use of fog effects impossible, so they are typically turning off the air ventilators to use the effect, then turning them back on after the video shoot has

been completed. Karl Ruling mentioned that Monona Rossol's recent NATEAC presentation had referred to another organization's standard (not ASHRAE 55) as the reference for air quality.

Joe Kapp mentioned that ASHRAE addresses both indoor air comfort (ASHRAE 55) and indoor air quality (ASHRAE 62.1 – 2019, *Ventilation for acceptable air quality*). They are also working on a supplement 42P to address infectious disease in commercial and institutional facilities.

6.7 Introduction to Modern Atmospheric Effects, 6th edition

No news or action.

6.8 New York City code changes – follow up

From the July 2021 meeting minutes:

Eddie Kramer reported that New York City has passed a code change that directs the fire department to draft requirements for filing plans for staging, special effects, and fire control for motion picture productions. It also empowers the fire department to stop a production if it is deemed unsafe.

Eddie reported that the NYC Fire Code is being rewritten for better correlation with the International Fire Code. The current NYC code references the 2003 IFC. The revision will reference the 2021 IFC, and will result in the NYC code sections more closely relating to the IFC section numbering and requirements. He gave a few examples of the changes being made. None seemed onerous for our industry. He said he would send the 100-page PDF report to Karl and Richard via email.

7 New business

None.

8 Other business and announcements

8.1 Above & Beyond Awards

Information on the Above & Beyond Awards may be found at http://tsp.esta.org/tsp/news/award_recipients.html.

8.2 Other announcements

None.

9 Schedule for future meetings

The full meeting schedule may be found at <http://www.esta.org/ESTA/meetings.php>. We're expecting to have meetings in conjunction with the USITT Conference in Baltimore in March.

The USITT meeting schedule is posted, but the meeting location will change. There was a brief discussion of hotels in Baltimore.

10 Adjournment

With the agenda business completed, and no further business brought forth, Mike Wood declared the meeting adjourned at 11:57.

Fog & Smoke Working Group members as of 17 January 2022

Delegate	Representing	Voting status	Int. cat.
Matthew Antonucci	Contract Services Administration Trust Fund	P	U
Daniel Ayers	StageRight Services LLC	P	DE
Robert Barbagallo	Solotech Inc.	O	U
Paul Beasley	Walt Disney Company	O	U
Justin Bennett	University of the Incarnate Word	O	U
Brad Dittmer	Stage Labor of the Ozarks	O	U
Mike Garl	Mike Garl Consulting LLC	exf	
Jerry Gorrell	Theatre Safety Programs	O	G
Robert Haycock	UC Berkeley	O	U
Clark James	Alliance of Special Effects and Pyrotechnic Operators (ASEPO)	P	U
Paul Jordan	NBC Universal	O	U
Nathan Kahn	Look Solutions USA Ltd.	O	MP
Joseph Kapp	WSP USA Corp.	I	G
Edwin S. Kramer	I.A.T.S.E. Local 1	P	DE
Tyler Mickley	Look Solutions, LLC.	O	CP
Chris Moulton	Contract Services Administration Trust Fund	A	U
Karl G. Ruling	Unit 12 Productions	I	CP
Larry Schoeneman	Larry Schoeneman	O	G
Ford Sellers	Chauvet Lighting	O	MP
Mona Shum	Aura Health and Safety Corporation	I	U
Mike Skinner	Contract Services Administration Trust Fund	A	U
Keith Sklar	Actors' Equity Association	P	G
Marnie Styles	Ultratec Special Effects Inc.	O	MP
Stephen Vanciel	Stephen Vanciel	P	DE

Fog & Smoke Working Group members as of 17 January 2022

Delegate	Representing	Voting status	Int. cat.
Colin Waters	TMB	O	G
Mike Wood	Mike Wood Consulting LLC	P	G

Membership table key:

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|-----------------------|---------------------------|
| P Principal voter | CP Custom-market producer |
| A Alternate voter | DE Designer |
| I Individual voter | DR Dealer/Rental company |
| O Observer, non-voter | G General interest |
| | MP Mass-market producer |
| exf Ex officio, staff | U User |