

Minutes
Fog & Smoke Working Group
Thursday 11 July 2024
New York City College of Technology

Chairpersons:

Steve Vanciel; Steve Vanciel; I; DE
Karl Ruling; Unit 12 Productions; I; CP (Presiding)

Recording secretaries:

Karl Ruling and Richard Nix (ESTA)

Attendees:

Keith Sklar; Actors' Equity Association; P; G
Ford Sellers; Chauvet Lighting; O; MP
Robert Haycock; Robert Haycock; O; U
Mike Skinner; Contract Services Administration Trust Fund; A; U
Joseph Kapp; WSP USA Corp.; P; G
Nathan Wilkinson; Actors' Equity Association; A; G
Jeff Egan; NBC Universal; P; U
Nick Vreugdenhil; Ultratec Special Effects; P; MP

Visitors:

Ethan Gilson; Entertainment Rigging Services
Daimien Matherson; Actor's Equity Association
Kim Garner; Actor's Equity Association
Jacelyn Szkrybalo; Actor's Equity Association
Ethan Schwatz; Actor's Equity Association
Philip Ring; Actor's Equity Association
Seth Randall Tappell; Actor's Equity Association
Theresa Bailey; Actor's Equity Association
Meghan Guastella; Actor's Equity Association
Jeffery Bateman; Actor's Equity Association
Paul Doble; Actor's Equity Association
Austen Howard; Actor's Equity Association
Joanna Spencer; Actor's Equity Association

1 Opening Remarks

Steve Vanciel called the meeting to order at 12:00pm, welcoming everyone to the meeting and thanking them for taking time to attend. Since he was attending online, he handed the meeting gavel to Karl Ruling, in the room, who presided for the remainder of the meeting.

2 Patent and anti-trust statements

2.1 Reading of the anti-trust statement

Karl Ruling 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 noted that the pamphlet is available upon request.

2.2 Reading of the call for patents

Karl Ruling 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.

No IP concerns were brought forth.

3 Attendance and Membership

3.1 Requirements for membership

Karl Ruling read the following statement aloud to the assembly:

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. This fee will increase to \$150 in 2025. New applications shall not be processed until the participation fee is paid. 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

3.3 Determination of a quorum

The voting body as of today's date is ten. A quorum is four voting members, a supermajority is six voting members.

Richard Nix confirmed that the quorum requirements were met.

3.4 Processing of new membership and status change requests

*Nick Vreugdenhil; Ultratec Special Effects; P; MP (new application)
Monona Rossol; Arts, Crafts & Theater Safety; P; G (new application)
Jeff Egan (status change request from Observer to Principal voting)
Joe Kapp (status change request from Observer to Principal voting)*

Keith Sklar moved to accept the applications, with those present and applying for voting status approved as submitted, and those applying for voting status but not present be approved as Observer. The motion was seconded, and carried without objection or abstention.

Steve Vanciel moved to accept the status change requests from Jeff Egan and Joe Kapp. The motion was seconded and carried without objection or abstention.

3.5 Changes to observer status for inactivity

The following voting entities' representatives have missed two consecutive meetings. Their status will be changed to Observer if they are not present at this meeting:

- Mona Shum; Aura Health and Safety Corporation
- Edwin S. Kramer; I.A.T.S.E. Local 1
- Dean Wilson; Look Solutions, USA
- Daniel Ayers; StageRight Services, LLC

None were present, so their voting status was changed as noted.

3.6 Consensus body after all changes resulting from meeting action.

Name	Representing	Status	Int Cat
Keith Sklar	Actors' Equity Association	P	G
M. Nathan Wilkinson	Actors' Equity Association	A	G
Clark James	Alliance of Special Effects and Pyrotechnic Operators (ASEPO)	P	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
Stephen Vanciel	Stephen Vanciel	P	DE
Nick Vreugdenhil	Ultratec Special Effects	P	MP
Karl G. Ruling	Unit 12 Productions	I	CP
Jeff Egan	NBC Universal	P	U
Margaret Burke	Warner Brothers Discovery Park	P	U
Joseph Kapp	WSP USA Corp	P	G
Total votes possible		10	
Custom market producer	Votes by interest category	1	CP
Designer		1	DE
Dealer/Rental company		0	DR
General interest		2	G
Mass marker producer		1	MP
User		4	U

4 Approval of the minutes from the last meeting

[See FSmin01-2024_DRAFT.pdf]

Keith Sklar moved to approve the minutes. The motion was seconded, and carried without objection.

5 Approval of agenda

Keith Sklar asked to add an agenda item pertaining to general discussion about the TSP process, for the benefit of the many AEA visitors in the room. Richard Nix suggested now would be a good time to discuss this topic. Karl Ruling agreed. Keith Sklar moved to approve the agenda as amended. The motion was seconded and carried without objection.

Richard Nix and Karl Ruling explained the application and participation process. There was discussion about participation, applications, and general meeting process.

6 Old Business

6.1 ANSI E1.5 – 2009 (R2024), Entertainment Technology - Theatrical Fog Made with Aqueous Solutions of Di- and Trihydric Alcohols (Revise, reaffirm, or withdraw by 29 February 2029)

The reaffirmation process is complete. It's reaffirmed and published!

No other news or action.

6.2 ANSI E1.14 – 2018 (R2023), Entertainment Technology—Recommendations for Inclusions in Fog Equipment Manuals (Revise, reaffirm, or withdraw by 16 May 2028).

Any news or action?

No news or action.

6.3 ANSI E1.23 - 2023, Entertainment Technology - Design and Execution of Theatrical Fog Effects (Revise, reaffirm, or withdraw by 12 December 2028).

Any news or action?

No news or action.

6.4 ANSI E1.29 – 2009 (R2024), 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 (Revise, reaffirm, or withdraw by 29 February 2029)

The reaffirmation process is complete. It's reaffirmed and published!

No other 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)

Any news or action?

Keith Sklar described the methods used to simulate dust for *The Outsiders* production. No other news or action.

6.6 Introduction to Modern Atmospheric Effects, 6th edition

Any news or action?

No news or action.

7 New business

7.1 Glycols vs glycerin-based fluids

[see [FW_ fluids in Canada _ Fastmail.pdf](#), [6-42 Training with artificial smoke _ Section 6_ Procedures _ ontario.ca.pdf](#), [Glycols-vs-Glycerin-Fog-Fluids.pdf](#), [NIOSH_HHE_report_2012-0028-3190.pdf](#), and [Official_SimplyFog-MSDS.pdf](#)]

Chris Markgraf with Froggy's Fog sent several items of information for discussion, regarding the fact that glycol-based fluids have been banned in many countries. They've been distributed to the working group for discussion.

Karl Ruling gave an overview of the documents, saying that he didn't think most aspects were important because they addressed firefighter training – not theatrical effects – the exposure levels are much higher than our industry permits, firefighters use respirator devices during the training, and often use the products in conjunction with live flame, which will cause glycol-based fluids to breakdown. Keith Sklar said that he had heard some states are disallowing certain types of fluids.

8 Other business and announcements

8.1 Above & Beyond Awards

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

8.2 Call for educational sessions at 2025 NAMM Show

A call for educational session proposals for the 2025 NAMM Show is now open. This was a topic of conversation at the last working group meeting. Interested parties should contact Laura Hoepker (laura.hoepker@esta.org) for details.

9 Schedule for future meetings

The full meeting schedule is posted at <http://www.esta.org/ESTA/meetings.php>. Fall meetings will return to Westlake, TX. During the week of 21 October 2024. This working group is not scheduled to meet at that time. Winter meetings will return to Anaheim, CA, in conjunction with the NAMM Show 2025, during the week of 20 January 2025

Those present discussed when next to meet. Consensus said the working group's next meeting will occur in January 2025.

10 Adjournment

Having completed the agenda with no further business brought forth, Karl Ruling adjourned the meeting at 13:04.

Working Group roster as of 11 July 2024

Name	Representing	Status	Int cat
Matthew Antonucci	Contract Services Administration Trust Fund	P	U
Daniel Ayers	StageRight Services LLC	O	DE
Robert Barbagallo	Solotech Inc.	O	U
Paul Beasley	Walt Disney Company	O	U
Justin Bennett	University of the Incarnate Word	O	U
Jeff Egan	NBC Universal	P	U
Jerry Gorrell	Theatre Safety Programs	O	G
Robert Haycock	Robert Haycock	O	U
Clark James	Alliance of Special Effects and Pyrotechnic Operators (ASEPO)	P	U
Joseph Kapp	WSP USA Corp.	P	G
Edwin S. Kramer	I.A.T.S.E. Local 1	O	DE
Chris Markgraf	Froggy's Fog LLC	O	MP
Chris Moulton	Contract Services Administration Trust Fund	A	U
Margaret Burke, MPH	Warner Brothers Discovery	P	U
Monona Rossol	Monona Rossol	O	G
Karl G. Ruling	Unit 12 Productions	I	CP
Ford Sellers	Chauvet Lighting	O	MP
Mona Shum	Aura Health and Safety Corporation	O	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	I	G
Nick Vreugdenhil	Ultratec Special Effects	P	MP
Colin Waters	TMB	O	G
Nathan Wilkinson	Actors' Equity Association	A	G
Dean Wilson	Look Solutions, USA	O	MP