

**Minutes**  
**Technical Standards Council**  
Friday, Apr 3, 2020

**Chairpersons:**

Mike Garl; Mike Garl Consulting, LLC; P; (presiding)  
Mike Wood; Mike Wood Consulting, LLC; P

**Recording secretaries:**

Karl Ruling and Richard Nix; ESTA

**Attendees:**

Alan M. Rowe; IATSE Crafts Advancement Program ; P  
Bill Sapsis; Sapsis Rigging, Inc.; P  
D. Andrew Gibbs, Ph.D.; Amer. Society of Theatre Consultants; P  
David E. Miller; Walt Disney Company; P  
Edwin S. Kramer; I.A.T.S.E. Local 1; P  
Erin Grabe; ESTA; exf  
Jerry Gorrell; USITT; P  
Keith Sklar; Actors' Equity Association; P  
Larry Schoeneman; Larry Schoeneman; I  
Michael Lay; Candela Controls, Inc; P  
Mike Garl; Mike Garl Consulting LLC; P  
Mike Wood; Mike Wood Consulting LLC; P  
Mitch Hefter; Mitch Hefter; P  
R. Duane Wilson; Amer. Society of Theatre Consultants; A  
Steve Terry; Electronic Theatre Controls, Inc.; P  
William Gillett; Walt Disney Company; A

**Visitor:** Mike Skinner; CSATF, attending for Matt Antonucci

**1 Opening Remarks**

Mike Garl called the meeting to order at 15:03 CDT, thanking everyone for taking time to attend. He wished everyone good health. He reminded everyone to mute their microphones when not speaking.

**2 Attendance and membership**

**2.1 Taking attendance and introductions**

Attendance was done via the WebEx log-in records. Everyone present knew everyone.

**2.2 Welcome to visitors**

Mike Skinner was the only visitor. He was welcomed.

**2.3 Call for quorum**

After reviewing the attendee list, Mike Garl announced that a quorum was present.

**2.4 Consensus body changes**

None.

**2.5 Consensus body**

Name	Company or representation	Voting status
Keith Sklar	Actors' Equity	P
D. Andrew Gibbs, Ph.D.	Amer. Society of Theatre Consultants	P

<b>Name</b>	<b>Company or representation</b>	<b>Voting status</b>
R. Duane Wilson	Amer. Society of Theatre Consultants	A
Matthew Antonucci	Contract Services Administration Trust Fund	P
Larry Schoeneman	Larry Schoeneman	P
Steve Terry	Electronic Theatre Controls, Inc.	P
Todd Spencer	ESTA President	P
Edwin S. Kramer	I.A.T.S.E. Local 1	P
Alan M. Rowe	IATSE Crafts Advancement Program	P
Mike Garl	Mike Garl Consulting LLC	P
Mike Wood	Mike Wood Consulting LLC	P
Mitch Hefter	Mitch Hefter	P
Michael Lay	Candela Controls, Inc.	P
Bill Sapsis	Sapsis Rigging, Inc.	P
Jerry Gorrell	USITT	P
Louis Bradfield	USITT	A
David E. Miller	Walt Disney Company	P
William Gillett	Walt Disney Company	A
	<b>Total votes possible</b>	<b>15</b>

### **3 Approval of minutes from the previous meeting**

See *TSCmin01-2020DRAFT.pdf*

Mike Wood moved to approve the minutes. The motion was seconded. Two typos were corrected. After those were corrected, the minutes were approved with all voting in favor except for one abstention.

### **4 Patent and anti-trust statements**

#### **4.1 Reading of the anti-trust statement**

The following statement was aloud to the assembly by Mike Garl:

*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 a copy of the pamphlet in front of his webcam to show it was available.

No anti-trust concerns were raised.

#### **4.2 Reading of the call for patents**

The following statement was aloud to the assembly by Mike Garl:

*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.*

Nothing was revealed.

## **5 Approval of agenda**

Mike Garl asked if there were any changes needed to the agenda.

Bill Sapsis moved that we approve the agenda as written. The motion was seconded. The motion was approved with no opposition and not abstentions.

## **6 Old Business and standing reports**

### **6.1 Financial reports**

#### **6.1.1 Treasurer's Report and Status of Contributions and Pledges**

Erin Grabe reported. Everyone has a copy of the new financial report. She said there had been a few rounds of budget cuts and funds reallocation, but said that we should break even if the financial projections are accurate, if we maintain the level of contributions.

#### **6.1.2 TSP Fundraising**

#### **6.1.3 Accounting of TSP documents sold and downloaded**

See *ANSI\_Q4-2019.pdf*

#### **6.1.4 ANSI dues**

See *ANSI\_invoice.pdf* and *ANSI Membership dues invoice ANSI\_00370611 \_ Fastmail.pdf*.

Karl Ruling reported that he has been told that the invoice has been sent to Frank Stewart for payment.

### **6.2 Old Business**

#### **6.2.1 Technical Standards Program project report**

See *TSPPrjctsSmmry2020-04.pdf*

#### **6.2.2 Working group documents for possible action by the TSC**

##### **6.2.2.1 Public reviews**

##### **6.2.2.1.1 BSR E1.6-1 - 202x**

See *BSR E1.6-1 – 202x\_Rig2006-2011r9.pdf*

Bill Sapsis reported that the RWG had voted to offer it for public review. Sapsis moved that it be offered for public review. The motion was seconded.

<b>Name</b>	<b>Company or representation</b>	<b>Vote</b>
Keith Sklar	Actors' Equity	Y
D. Andrew Gibbs, Ph.D.	Amer. Society of Theatre Consultants	Y
R. Duane Wilson	Amer. Society of Theatre Consultants	

<b>Name</b>	<b>Company or representation</b>	<b>Vote</b>
Matthew Antonucci	Contract Services Administration Trust Fund	
Larry Schoeneman	Larry Schoeneman	Y
Steve Terry	Electronic Theatre Controls, Inc.	Y
Todd Spencer	ESTA President	
Edwin S. Kramer	I.A.T.S.E. Local 1	Y
Alan M. Rowe	IATSE Crafts Advancement Program	Y
Mike Garl	Mike Garl Consulting LLC	Y
Mike Wood	Mike Wood Consulting LLC	Y
Mitch Hefter	Mitch Hefter	Y
Michael Lay	Candela Controls, Inc.	Y
Bill Sapsis	Sapsis Rigging, Inc.	Y
Jerry Gorrell	USITT	Y
Louis Bradfield	USITT	
David E. Miller	Walt Disney Company	Y
William Gillett	Walt Disney Company	
	<b>Total Yes:</b>	<b>13</b>
	<b>Total No:</b>	<b>0</b>
	<b>Total Abstain:</b>	<b>0</b>
	<b>Not present to vote:</b>	<b>2</b>

The motion carried.

**6.2.2.1.2 BSR E1.39 - 202x**

See E1-39\_201x rev04.01.2020 reformatted.pdf

Sapsis reported that the Rigging Working Group had voted to offer BSR E1.39 for public review. He moved that the TSC approve the action. His motion was seconded. There was no discussion.

<b>Name</b>	<b>Company or representation</b>	<b>Vote</b>
Keith Sklar	Actors' Equity	Y
D. Andrew Gibbs, Ph.D.	Amer. Society of Theatre Consultants	Y
R. Duane Wilson	Amer. Society of Theatre Consultants	
Matthew Antonucci	Contract Services Administration Trust Fund	
Larry Schoeneman	Larry Schoeneman	Y
Steve Terry	Electronic Theatre Controls, Inc.	Y
Todd Spencer	ESTA President	
Edwin S. Kramer	I.A.T.S.E. Local 1	Y
Alan M. Rowe	IATSE Crafts Advancement Program	Y
Mike Garl	Mike Garl Consulting LLC	Y
Mike Wood	Mike Wood Consulting LLC	Y

Name	Company or representation	Vote
Mitch Hefter	Mitch Hefter	Y
Michael Lay	Candela Controls, Inc.	Y
Bill Sapsis	Sapsis Rigging, Inc.	Y
Jerry Gorrell	USITT	Y
Louis Bradfield	USITT	
David E. Miller	Walt Disney Company	Y
William Gillett	Walt Disney Company	
	<b>Total Yes:</b>	<b>13</b>
	<b>Total No:</b>	<b>0</b>
	<b>Total Abstain:</b>	<b>0</b>
	<b>Not present to vote:</b>	<b>2</b>

The motion carried.

#### 6.2.2.2 Withdrawals

No action.

#### 6.2.2.3 Accept as ANS

No action.

#### 6.2.2.4 New projects

See *Curtain Machines\_ProjectRequest\_Revised.pdf* and *Moving Floor Machines\_ProjectRequest\_Revised.pdf*

Richard Nix and Karl Ruling explained the need for the two projects and the work that has been done in the Stage Machinery Working Group to outline how these standards might be developed.

Steve Terry and Mike Wood both moved that the projects be accepted. The motion was seconded. All in favor. No opposition and no abstention.

Name	Company or representation	Vote
Keith Sklar	Actors' Equity	Y
D. Andrew Gibbs, Ph.D.	Amer. Society of Theatre Consultants	Y
R. Duane Wilson	Amer. Society of Theatre Consultants	
Matthew Antonucci	Contract Services Administration Trust Fund	
Larry Schoeneman	Larry Schoeneman	Y
Steve Terry	Electronic Theatre Controls, Inc.	Y
Todd Spencer	ESTA President	
Edwin S. Kramer	I.A.T.S.E. Local 1	Y
Alan M. Rowe	IATSE Crafts Advancement Program	Y
Mike Garl	Mike Garl Consulting LLC	Y
Mike Wood	Mike Wood Consulting LLC	Y
Mitch Hefter	Mitch Hefter	Y
Michael Lay	Candela Controls, Inc.	Y

<b>Name</b>	<b>Company or representation</b>	<b>Vote</b>
Bill Sapsis	Sapsis Rigging, Inc.	Y
Jerry Gorrell	USITT	Y
Louis Bradfield	USITT	
David E. Miller	Walt Disney Company	Y
William Gillett	Walt Disney Company	
	<b>Total Yes:</b>	<b>13</b>
	<b>Total No:</b>	<b>0</b>
	<b>Total Abstain:</b>	<b>0</b>
	<b>Not present to vote:</b>	<b>2</b>

The project was referred back to the Stage Machinery Working Group.

### **6.2.3 Other old business**

#### **6.2.3.1 E1.19 in Spanish**

Richard Nix reported that there has been some resistance to our suggested copyright fee of \$100. That was considered by the translator as too much by him. He has no money. There was discussion of how much we might reduce the fee, which is principally to show that our intellectual property has value. \$10 was an amount agreed to have meaning but to be so low that no one can seriously say it is too much.

We would also like to post the standard on our website, with credit to the translator and translating organization. We would like to have the format offer the English standard and the Spanish translation together, side by side, perhaps on facing pages.

#### **6.2.3.2 E1.20 in Chinese**

No news or action.

### **7 New business**

No news or action.

### **8 Optional reports**

#### **8.1 Optional reports by working and task group leaders on active projects**

##### **8.1.1 Control Protocols**

Michael Lay reported that they had a productive Working group meeting. They set up a new, ad hoc, network security task group. Acuity's lawyers have insisted that security on sACN be implemented to comply with California's new legislation for security of "connected devices."

##### **8.1.2 Electrical Power**

Mitch Hefter reported that E1.19 in the process of being revised, not reaffirmed. Another item of discussion involves multicables. The working group also discussed the proposed electrocution hazard project. The EPWG has decided that they are not the right group, so deferred it to ESWG, where there already is an event electrical safety project.

##### **8.1.3 Floors**

Karl Ruling reported that the WG had received continuing objections to the draft E1.62 portable stage platform standard, but had decided to move forward with an approved response to the objector.

#### **8.1.4 Fog and Smoke**

Larry Schoeneman reported that the WG had met two weeks ago. He said that Cedric Jackson had brought forward new legislation regarding fog and smoke exposures for minors on-set. After discussion, the group had decided not to move forward with any formal standard at this point, but to simply develop some industry work rules. Cedric Jackson will ask for the science behind the legislation, for further review and discussion.

Mona Shum had reported that her studies on atmospheric effects use on set have been held up by the COVID-19 pandemic, which has limited motion picture production and diverted the medical expert working with her to dealing with the pandemic.

Karl Ruling reported that the latest version of ANSI E.23, fog effects planning, execution, and maintenance, has been approved by ANSI's Board of Standards Review and published.

#### **8.1.5 Followspot Position**

Richard Nix reported that E1.66 had been approved by ANSI's Board of Standards Review just a few minutes before this report.

#### **8.1.6 Photometrics**

The working group meets tomorrow (April 4) so no report.

#### **8.1.7 Rigging**

Bill Sapsis thanked Richard Nix and Karl Ruling for helping to keep last night's WebEx working group meeting running smoothly. He reported about E1.4-3, E1.47 and E1.21 all of which had been approved by ESTA's Executive Committee, and either will be or already have been sent to ANSI for approval. He also said they had started a new project for ground-supported, hand-cranked towers.

The working group is reviewing the performer flying standard, ANSI E1.43. Sapsis said that a lot of people are interested in working on a revision.

#### **8.1.8 Stage machinery**

Jerry Gorrell reported that the main orders of business were the two new projects, just approved by TSC: curtain machines and floor machines.

#### **8.1.9 Event Safety**

### **8.2 Reports of affiliated organizations**

#### **8.2.1 ASTC**

Andy Gibbs reported nothing to report, but the membership had their general meeting today and are paying attention to the standards we have developed or are developing.

#### **8.2.2 Event Safety Alliance**

#### **8.2.3 NFPA**

##### **8.2.3.1 FDW-AAA committee (NFPA 80 fire doors & fire safety curtains)**

Jerry Gorrell reported that they have a face-to-face meeting scheduled for the Fall, which may or may not happen depending upon pandemic safety conditions.

##### **8.2.3.2 SPE-AAA (NFPA 160 & 1126, flame and pyrotechnics)**

Larry Schoeneman reported that the new edition of NFPA 160 has been published. No news otherwise.

##### **8.2.3.3 SAF-AXM & BLD (assembly occupancies. NFPA 101, 102, & 5000)**

Jerry Gorrell reported nothing major, but there is continued work on reducing falls from sports stadium balconies.

#### **8.2.3.4 NEC (NFPA 70)**

Mitch Hefter reported that the next edition the National Electrical Code is open comments, with those comments due September 10. Steve Terry is on a task group dealing with POE emergency lighting.

Terry reported on significant work on Article 530 by our Hollywood constituents. That article in the current edition of the National Electrical Code is out of date.

#### **8.2.3.5 NEC (Panel 18 representation)**

Mitch Hefter reported that Jason Potterf is now on the panel.

#### **8.2.3.6 NFPA 70E**

Jerry Gorrell said that the new version of NFPA 70E, Standard for Electrical Safety in the Workplace, is done, unless there are motions from the floor at the convention in June.

#### **8.2.4 USITT**

Mitch Hefter reported that USITT lost a lot of money with the cancellation of the USITT conference, but that most of the vendors have been accommodating, allowing the fees they paid to be applied to the next conference rather than being refunded. The Institute is working to set up online presentations consistent with the conference program. Next year's conference will be in Columbus, Ohio.

#### **8.2.5 DTHG**

Karl Ruling reported that they have a mini-convention, the Bühnentechnische Tagung, scheduled for June in Ulm, that has not been canceled yet, although they have dispersed the DTHG office staff to work remotely from home.

#### **8.2.6 ICC**

Richard Nix reported that the ICC 2024 code change cycle had just commenced, and that he had been asked to assist in leadership of the Chapter 31 committee (our equivalent of a task group) on tents and special event structures.

#### **8.2.7 IES**

Mitch Hefter reported that they plan to launch the on-line library in August. All the Illuminating Engineering Society's documents are being run through the ANSI standards-approval process, even those that are explanations of light and the human visual system. Lightfair had been postponed but it is now canceled. The Annual Conference is scheduled for August 6-8, 2020 in New Orleans, Louisiana.

#### **8.2.8 UL**

Richard Nix reported that he is now on UL STP 1340 for hoists and UL 1322 for scaffolds.

### **9 Other business and announcements**

#### **9.1 Above & Beyond Awards**

Information on the Above & Beyond Awards may be found at [http://tsp.esta.org/tsp/news/award\\_recipients.html](http://tsp.esta.org/tsp/news/award_recipients.html). The nomination site is open year-round. Mike Garl urged people to consider if anyone has gone above and beyond.

#### **9.2 Lifetime Technical Achievement Award**

Mike Garl urged people to consider if anyone has achieved notable lifetime technical achievements.

#### **9.3 Volunteer of the Year Award**

Mike Garl urged people to consider if anyone has been a notable volunteer.

#### **9.4 Swan Award**

Ditto on the Swan Award.

#### **9.5 TSP participation fee donor fund**

Karl Ruling reported that we have had no recent requests.



## **9.6 INNOVA**

Erin Grabe reported that the content is back online. John Huntington has produced three good presentations, but that more content is needed. She also said that it is potentially an expenditure that we may need to cut. ESTA's participation in INNOVA has not broken even. It is a net cost, so far.

## **9.7 Strategic Plan**

Erin Grabe reported that the plan was going strong at the beginning of the year, but that current COVID situation had slowed things down. She said that new software to replace AA was about to be in place with the rollout of other software, which will save ESTA about \$35k in expenses. She said that other online efforts had been improved, and continue to move smoothly.

## **10 Schedule for future meetings**

*The meeting schedule may be found at <http://www.esta.org/ESTA/meetings.php>.*

### **10.1 Summer 2020 meetings (NATEAC, NYC)**

The Summer 2020 meetings will be held in conjunction with the NATEAC event in New York City, 19-20 July 2020. The complete schedule has not yet been confirmed. NATEAC organizers will determine in mid-April if the conference can proceed. Bill Sapsis (the principal organizer) said that he is working on a press release. Mike Garl said that we will meet in July, but the exact meeting arrangements are to be determined.

### **10.2 Autumn 2020 meetings**

They are scheduled for the first weekend of October at the Marriott Solana in Westlake, TX. Erin Grabe said she'd never wanted to go to Texas so badly. It would be nice to travel anywhere.

## **11 Adjournment**

Bill Sapsis moved to adjourn. The agenda being completed, and there being no further business to conduct, Mike Garl thanked everyone for attending and declared the meeting adjourned at 16:19 CDT.

Technical Standards Council members

Delegate	Company	Representation	Voting status
Matthew Antonucci	Contract Services Administration Trust Fund	Contract Services Administration Trust Fund	P
Harry Box	Production Equipment Rental Group	PERG	O
Louis Bradfield	Louis Bradfield	USITT	A
Mike Garl	Mike Garl Consulting LLC	Mike Garl Consulting LLC	P
William Gillett	Disney Parks Live Entertainment	Walt Disney Company	A
Jerry Gorrell	Theatre Safety Programs	USITT	P
Erin Grabe	ESTA	ESTA	exf
Mitch Hefter	Mitch Hefter	Mitch Hefter	P
Edwin S. Kramer	I.A.T.S.E. Local 1	I.A.T.S.E. Local 1	P
Michael Lay	Candela Controls, Inc	Candela Controls, Inc	P
David E. Miller	Walt Disney Parks & Live Entertainment	Walt Disney Company	P
Richard J. Nix	ESTA	ESTA	exf
D. Andrew Gibbs, Ph.D.	D. A. Gibbs and Associates	Amer. Society of Theatre Consultants	P
Eddie Raymond	IATSE Local 16	IATSE Local 16	O
Alan M. Rowe	IATSE Local 728	IATSE Crafts Advancement Program	P
Karl G. Ruling	ESTA	ESTA	exf
Bill Sapsis	Sapsis Rigging, Inc.	Sapsis Rigging, Inc.	P
Larry Schoeneman	Larry Schoeneman	Larry Schoeneman	I
Keith Sklar	Actors' Equity Association	Actors' Equity Association	P
Todd Spencer	PSAV Presentation Services	ESTA President	P
Stephen G. Surratt	Texas Scenic Company	Texas Scenic Company	exf
Steve Terry	Electronic Theatre Controls	Electronic Theatre Controls, Inc.	P

Technical Standards Council members

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Delegate	Company	Representation	Voting status
R. Duane Wilson	George C. Izenour Associates	Amer. Society of Theatre Consultants	A
Mike Wood	Mike Wood Consulting LLC	Mike Wood Consulting LLC	P

**Voting status codes:**

P Principal voter  
A Alternate voter  
O Observer, non-voter  
exf Ex Officio