

Minutes
Followspot Position Working Group Meeting

Thursday, 28 July 2005
Dallas/Ft. Worth Airport Marriott South
Ft. Worth, Texas

Presiding chairman: Robin Crews; Wrightson, Johnson, Haddon & Williams, Inc.; P; G

Recording secretary: Karl G. Ruling; ESTA

Members attending: Chip Purchase; Jones Hall (Foundation for Jones Hall); P; U
Edwin S. Kramer; I.A.T.S.E. Local 1; P; U
Richard Logothetis; Lycian Stage Lighting; P; MP
Steve Rust; Sachs Morgan Studio; P; G
Stephen Vanciel; I; U
Shawn Nolan; Entertainment Structures Group (Steven Schafer Associates); P;
G
Jerry Gorrell; Theatre Safety Programs; O; U
William L. Maiman; I; G

1 Opening remarks

Robin Crews called the meeting to order at 19:01.

2 Patent and Anti-Trust statements

2.1 Patent statement

The following was read aloud to the assembly by Robin Crews

"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 patent or copyright issues were brought to the attention of the assembly.

2.2 Anti-trust statement

The following was read aloud to the assembly by Robin Crews

"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 a pamphlet. No restraint of trade issues were brought to the attention of the assembly.

3 Attendance & membership

3.1 Introductions

All present knew each other, so self-introductions were not done.

3.2 Taking attendance

A screaming green attendance sheet was circulated and those present signed in.

3.3 Requirements for membership

Membership in the working group is open to all who are affected by the work of the group. Voting members are required to attend meetings and to vote on letter ballots. Voting members and their alternates may not miss three consecutive meetings without a loss of voting status.

3.4 Determination of quorum (11 voting members: a quorum is 4; a supermajority at least 6)

Robin Crews announced that a quorum was present.

3.5 Processing of new membership requests

None.

The consensus body during this meeting, including those not present, was:

Name	Company	Representing	Voting status	Int. cat.
Jack Schmidt	Special Lighting Solutions	Ballantyne of Omaha, Inc.	P	MP
Chip Purchase	Jones Hall	Foundation for Jones Hall	P	U
Edwin S. Kramer	I.A.T.S.E. Local 1	I.A.T.S.E. Local 1	P	U
Richard Logothetis	Lycian Stage Lighting	Lycian Stage Lighting	P	MP
Fred Lindauer	Robert Juliat USA	Robert Juliat SA	P	MP
Steve Rust	Sachs Morgan Studio	Sachs Morgan Studio	P	G
Stephen Vanciel	Stephen Vanciel	Stephen Vanciel	I	U
Shawn Nolan	Entertainment Structures Group	Steven Schafer Associates	P	G
Richard D. Thompson	Thompson Associates	Thompson Associates	P	G
William L. Maiman	William L. Maiman	William L. Maiman	I	G
Robin Crews	Wrightson, Johnson, Haddon & Williams, Inc.	Wrightson, Johnson, Haddon & Williams, Inc.	P	G
			11	Total
			3	MP
			0	CP
		Voters by interest category	0	DR
			3	U
			5	G

4 Approval of minutes from the previous meeting

Eddie Kramer moved that the minutes be approved as written. The motion was seconded and then approved by a unanimous voice vote.

5 Approval of agenda

Eddie Kramer moved that the agenda be approved as written. The motion was seconded and then approved by a unanimous voice vote.

6 Old Business

Robin Crews asked for an overall assessment from the group about where this document is in the process and how they think the document will help the industry.

The consensus was that the document will have a positive effect on the industry. There was also the consensus that the parts of the document are good, but are not ready for assembly into a whole document next.

There was a discussion of the need for a time-line. The consensus was to have a one-piece working document by LDI so that it can be read and ready for discussion at the January meeting. Robin Crews said that he and Jack Schmidt will assemble the document.

6.1 Task group reports

6.1.1 Section 3, Architectural — Richard Thompson, Steve Rust, Steve Vanciel

The drawings produced by Steve Rust were discussed.

Richard Logothetis had several comments. He asked the pictures of followspots be more generic. The operator is usually at the front third of the followspot. The power supply is also usually at the back, said Logothetis. He also suggested that the followspots be drawn further left in the windows, so the operator is looking out of the window more in the center. Essentially, the space between the followspot and the operator needs to be on the centerline of the window. This is where the operator in reality is likely to position the followspot, so the drawings should reflect this.

There was a long discussion of how to categorizes venues and booths. A more intimate space is a Type 1 with throws of 100 feet or less and a connected stage lighting load of 230 kW or less, a Type 2 is over 100 feet and more than 230 kW connected stage lighting load, a Type 3 is like a Type 2 but with the anticipation of a traveling show bringing in additional equipment, and a Type 4 is like a Type 2 but is an arena venue.

There was a long discussion of ADA compliance with the booths. Wheelchairs require a 5' diameter turning area. The toilets would need to be ADA accessible.

6.1.2 Section 4, Structural — Shawn Nolan, Robin Crews, Jack Schmidt

There was a discussion of the structural problems of providing fall protection in arena situations. Richard Logothetis said that the ideal swing for an arena spotlight is 180 degrees.

6.1.3 Section 5, Electrical — Richard Logothetis, Eddie Kramer, Fred Lindauer

Robin Crews summarized that the various types of venues would have recommendations for appropriate power supplies.

6.1.4 Section 6, Ventilation — Chip Purchase, Jerry Gorrell, Jack Schmidt

Chip Purchase distributed the document that Jack Schmidt had described at the last meeting. The conclusions of the document were as he had said.

There was a discussion of what the heat load would be from the followspots. Karl Ruling suggested that the connected electrical load should be considered the heat load. He had recently edited a translation of an Illuminating Engineering Institute of Japan article in which two numbers were given for converting from lumens to watts, and the numbers suggested that there were a lot of lumens in a watt, so a very great light output would be needed to have a great portion of a followspot's input power be radiated onto the stage as light rather than going into the followspot position as heat.

[Note: After the meeting, Karl looked up the IEI-J article and the conversion numbers, and sent this information to the working group by email. The lumen equivalence (L_e) given in the article was 683 lm/W with a yellow-green light source emitting at 555 nm, and 182 lm/W with a plain white light

source. This last number is a ballpark number, since there are so many spectral power distributions that people might call "plain white." As an example, he applied 182 lm/W to a 39-degree, 750 W Source Four luminaire. The rated field lumens of the instrument is 12,300 lumens, which calculates to 68 watts of power. Therefore, if the power input to the luminaire is 750 W, 682 W is turned into heat. If the luminaire is run for an hour, during that hour it will add 2,327 BTUs of heat to the followspot position.]

600 BTUs per hour is the heat output of a person, said Shawn Nolan.

6.2 ETW (LDI) seminar

Robin Crews asked that all those with presentations send them to him for distribution to the group and to prepare as a PowerPoint. No handout. Robin asked for photos of good and bad followspot positions. Bill Maiman volunteered to be a liaison with Primedia.

Robin Crews said he hopes that Jack Schmidt will be the coordinator for the presentations. Robin said that someone from each group shall send their presentation to Jack and Robin. They will put it together in some sort of form for the presentation at LDI. The idea would be six to eight minutes by each task group, and then Q & A.

7 New Business

None.

8 Other Business

None.

9 Schedule of future meetings and action items

No meeting at the Entertainment Technology Week (LDI) show. It was scheduled for 18:00 to 21:00 on Saturday, 12 November 2005 at the Rosen Plaza Hotel, but the working group decided at the last meeting not to have a meeting at the Entertainment Technology Week tradeshow (formerly called LDI). The next meeting will be in January 2006 at the Dallas/Ft. Worth Airport Marriott South in Ft. Worth, Texas.

10 Changes of voting status

The following voting member has missed more than two of the previous consecutive meetings, and will be moved to observer status if this meeting is also missed.

Richard D. Thompson; Thompson Associates

Robin Crews announced that Richard Thompson had failed to meet the minimum attendance requirement and is now moved to observer status. He may request a return to voting status at the next meeting he attends.

11 Adjournment

Chip Purchase moved that the meeting adjourn. The motion was seconded. The motion was approved on a voice vote. Robin Crews declared the meeting adjourned at 21:58.

Working Group Membership and Contact Information as of 7 November 2005

Name	Company	Representing	Voting status	Int. cat.
Jack Schmidt	Special Lighting Solutions	Ballantyne of Omaha, Inc.	P	MP
Chip Purchase	Jones Hall	Foundation for Jones Hall	P	U
Edwin S. Kramer	I.A.T.S.E. Local 1	I.A.T.S.E. Local 1	P	U
Edward Paget	Jones & Phillips Associates, Inc.	Jones & Phillips Associates, Inc.	O	G
Richard Logothesis	Lycian Stage Lighting	Lycian Stage Lighting	P	MP
Richard J. Nix	Performance Systems Integration	Performance Systems Integration	O	G
Fred Lindauer	Robert Juliat USA	Robert Juliat SA	P	MP
Steve Rust	Sachs Morgan Studio	Sachs Morgan Studio	P	G
Stephen Vanciel	Stephen Vanciel	Stephen Vanciel	I	U
Shawn Nolan	Entertainment Structures Group	Steven Schafer Associates	P	G
John Tedesco	The Phoebus Company, Inc.	The Phoebus Company, Inc.	O	MP
Jerry Gorrell	Theatre Safety Programs	Theatre Safety Programs	O	U
Richard D. Thompson	Thompson Associates	Thompson Associates	O	G
William L. Maiman	William L. Maiman	William L. Maiman	I	G
Robin Crews	Wrightson, Johnson, Haddon & Williams, Inc.	Wrightson, Johnson, Haddon & Williams, Inc.	P	G

Key to codes:

P	principal	MP	mass-market producer
A	alternate	CP	custom-market producer
I	individual	DR	dealer or rental company
O	observer	U	user
		G	general interest