

MINUTES
FLOORS WORKING GROUP

Saturday, July 27, 2002
DFW Airport Marriott South Hotel
Dallas / Fort Worth, Texas

Chair: Tim Hansen, Oasis Stage Werks, principal, producer
Recording Secretary William L. Maiman

1 Opening Remarks

Tim Hansen welcomed everyone to the meeting, noted that a quorum was present, and the meeting started at 0700 hours.

2 Attendance and Membership

People attending:

Bob Dagger American Harlequin Corp. Principal, Producer
Keith Sklar; Actors' Equity Assoc.; Observer; General interest – via telephone
Tim Hansen; Oasis Stage Werks; Principal; Producer
Tim Cox; PLASA; Principal; Producer
Michael Sean Graves; Rosco Laboratories; Principal; Producer – via telephone
Jerry Gorrell; Theatre Safety Programs; Principal; User –via telephone
Richard D. Thompson; Thompson Associates; Pricipal; General interest (joined at this meeting)

2.1 Introduction of those present

A salmon sign-in sheet was passed around the room. While it was circulating, those present introduced themselves. It was noted that some members are participating via audio conferencing and that others had sent their regrets

2.2 Call for Quorum

It was determined that a quorum was present.

3 Requirements for membership and Processing of new membership requests

Tim Hansen reviewed the membership requirements. Membership is open to all who are affected by the work of the group, but every principal member of the working group is required to attend meetings. Any principal member and voting alternate that both miss three consecutive meetings will have their membership status changed to observer. This action will be taken as the last item of business at each meeting and recorded in the minutes of that meeting.

The membership application of Dick Thompson of Thompson Associates was considered. Bob Dagger made a motion to accept the application, Tim Cox provided the second, and the vote to accept was unanimous.

The full list of Floors Working Group voters during the period of the meeting was thus:

| Name | Company | Representing | Voting Stat | Cat. |
|---------------------|-------------------------|-------------------------|-------------|-------------------|
| Bob Dagger | American Harlequin | American Harelquin | P | P |
| Dick Thompson | Thompson Associates | Thompson Associates | P | G |
| Tim Hansen | Oasis Stage Werks | Oasis Stage Werks | P | P |
| Tim Cox | PLASA | PLASA | P | G |
| Michael Sean Graves | Rosco Laboratories | Rosco Laboratories | P | P |
| Jerry Gorrell | Theatre Safety Programs | Theatre Safety Programs | P | U |
| | | | 6 votes | 3 P 2 G 1 U |

4 Approval of minutes from the previous meeting

Tim Cox moved that the minutes from the previous meeting be accepted. Dick Thompson seconded the motion. The motion was accepted unanimously on a voice vote.

5 ESTA Declarations

5.1 Anti-trust statement

Tim Hansen read aloud the anti-trust statement:

"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 action in restraint of trade have been taken and not properly annulled is requested to notify the TSC (chairs), or the ESTA President immediately.

"ESTA legal counsel has informed us that violations of the antitrust 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 \$100,000 and imprisoned for up to three years. An easy to read pamphlet describing restraint of trade issues is available from the Technical Standards Manager."

No anti-trust issues were brought to the attention of the chair.

5.2 Call for Patents:

Tim Hansen read aloud the call for patents:

"ESTA intends not to publish any standard that contains protected intellectual property, unless that property 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 programs contain no protected intellectual property."

"In keeping with the open disclosures policy, I ask if anyone present wishes to notify the working group of the existence of a patent that might protect material in a standard being developed by the working group. You need not be the holder of the patent or copyright to notify the working group of its existence."

No patent issues were brought to the attention of the chair.

6 Approval of Agenda

Tim Cox moved that the agenda be approved, with Performing Floors added. Dick Thompson seconded the motion. It was accepted unanimously on a voice vote.

7 Old Business

7.1 Report on Terminology, alternative words, Akron Rubber Center and PARA – Michael Sean Graves / Bob Dagger

Michael Sean Graves reported that he did not get material from any of his contacts. Bob Dagger reported that PARA –the Rubber and plastics institute, is funded partly by manufacturers and research grants. He had prepared a detailed report, however customs and FEDX have delayed delivering the report. HOWEVER, others have developed industry accepted terminology for resilience, bounce, slip resistance. Bob will bring the full report for the LDI meeting.

7.2 Discussion on new ASSE Standard, A1264.2-2001 – Jerry Gorrell / Tim Hansen

The new ASSE Standard, A 1264.2-2001 was reviewed and discussed. It was agreed that it was not at all relevant as a standard, however, the items at the end of the standard were important, i.e. Testing, Other ASTM standards, Recommendation of testing involving a pad. Tim Hansen summarized the discussion by adding, The Floors Working Group needs to be cognizant of its

existence and what it says. For example, E 11.2 Suggestions of slip resistant surfaces -- OTHERWISE they talk about tests –but no recommendations

Tim Hansen also noted recent communication by William (Bill) English – a developer of the English XL Variable Incidence Tribometer, that is referenced in ASTM – F1679 Test method for using a Variable Incidence Tribometer. Tim noted the website for Bill English is www.EnglishXL.com. (Telephone # (239) 728-3254, Fax # (239) 728-2304) This engineer specializes in Slip Resistance Testing and has developed a method of testing floor surfaces that simulates the heel striking the floor. In addition, there is other important information on Floors, Safety, and Testing. While important, and it may be useful, it is of limited usefulness for the Floors Working Group. This is because other parts of the feet (i.e. toes) are important with dancers.

Jerry Gorrell noted that ASTM is writing more standards – as the Federal Government is eliminating more Mil-Spec and other Federal mandated standards. This is a problem, since no one is keeping track of replacements and appropriate and new substitutions, revisions, etc. This will also be part of the problem in the rigging world as older standards are withdrawn. ASSE is –expanding their scope and moving intensively on ergonomics especially while government and the OSHA process is delayed.

7.3 ANSI Standard on Floors – Refine and approve the scope, determine the process and assign tasks - Tim Hansen

Tim summarized a few key points:

1. resilience and shock absorption
2. slip resistance
3. rake
4. but it appears that we are diff. Stages in research and maybe need to separate issues and maybe work on individual issues. Therefore, there is much research, so slip resistance is ready for standards. Rake is in need of more research –so better to delay standard writing for a while.

Dick Thompson offered to review building codes and point loading of stage floors.

Jerry Gorrell offered to work on the parts about resilience and add typical floor loads. Of course, that brings the question, What is a concentrated load?

Tim Hansen stressed that if each topic was analyzed and worked on at its own pace, different sections would be ready and continued progress would be made. This approach would manage the scope and outline the writing process, using resilience—with the appropriate Din portions and basing that on the Robbins testing that was already done. We could combine and then decide on a range that is appropriate and get consensus and we have part of a standard.

Tim Hansen asked for volunteers to form a Task group. Michael Sean Graves, Jerry Gorrell, and Tim Hansen agreed to do this, with the resources being based in Phoenix (with Jerry) and Michael Sean Graves to chair. The goal of the Task Group is work on a scope of the standards document.

Tim Hansen offered to continue investigating the F-13 machine and invite the English machine and his inventor to a future meeting.

–Brunn-Gabber –two groups

Investigate joining the group

Jerry Gorrell offered to talk to Safety experts in Phoenix about access to testing machines and if they have a contract to test floors –for slip resistance, etc. Then he will look at existing options – and how they apply to our usages, and report back to the Task Group. A possible scenario is for manufacturers to submit samples for testing to Jerry, using his facilities in Phoenix.

7.4.1 Draft of Scope of proposed Standard – Tim Hansen / Tim Cox

The discussion limited the scope of the proposed standard to performance areas – Michael Sean Graves offered to research ---what does performance areas mean and what is meant by term?

Dick Thompson noted that we need to insure a limitation to the scope to performance areas and not public areas, also limit scope to performance situations and rehearsals Also footwear is an important issue

Tim Cox commented that narrowing the propose scope, as developed at the February meeting was important and suggested what we work from here, and adopt the scope for a resilience document.

7.4 Examination of WG Mission Statement terminology – Michael Sean Graves (original Mission Statement) / Seth Popper (Revised)

Tim Cox offered to work on this and to use elements from the 10/18/200 meeting, and the new ideas presented by the Working Group. This will be updated and reported on at the LDI meeting – 10/02.

7.5 Raked Stages, Definition and other Criteria – Jerry Gorrell and Keith Sklar

Jerry Gorrell explained that his wife, Jenny has reviewed the new Rake study proposal being planned by Actors Equity and has comments and suggestions. Jenny will attend the LDI meeting to explain her concerns to the Working Group.

Dick Thompson agreed to copy his article "DANCERS SWEAT" and make it available to the Floors Working group.

Jerry Gorrell and Keith Sklar agreed to continue to review discussions and writing of a rake definition, based on the previous work done by the Working Group. The new definition will be presented at the LDI meeting.

Dick Thompson offered to contact dancers in Vegas and ask them to attend the meeting and share their concerns. Keith Sklar will work with Dick on trying to develop a method to ask a dancer about their concerns.

8 New Business

8.1 Discussion regarding Slip Resistance Measurement articles – Jerry Gorrell / Tim Hansen

Jerry noted that there were many conclusions, and highlighted the sentence about test instruments not being supported by consensus and standards. Tim Hansen commented that this is not the primary focus on what we see in our industry. Jerry also noted that the Health and Safety industry moves in cycles, and Slips and Falls is hot and getting much attention. However, that does not mean that everything is applicable to performance floors.

9 Other Business

Dr. Sotter is not needed for the LDI meeting, possibly he will join us at the Dallas meeting

Tim Hansen noted that a new book on Dance floors was published in the UK. Tim Cox will research the book and bring to the next meeting. Dance Floors, Mark Foley-author, Aug '98 Original pub. '91. Complete bibliographic information will be given at the next meeting.

Bob Dagger reported on arts in the Soviet Block –all were supervised by KGB, so no interest in performers opinions and therefore there is no real info on what people want, feel, or desire regarding dance floors.

Tim Cox noted that resilience has a group to work on it, and that slip resistance needs WG members. Tim Hansen noted, perhaps we will work on subject at a time – and slip resistance and rake will need to wait.

Future items for discussion: The Floors Working Group agreed to continued examination of Din Standards and translations, with Tim and Michael agreeing to look into sources of accurate translations.

10 Schedule for Future Meetings

The Technical Standards Program will hold the next series of meetings in Las Vegas during the week of October 14 – 20. The next meeting of the Floors Working Group is scheduled for Wednesday, October 16, 2002 at 0800 hours at the Las Vegas Hilton. LDI 2002 is scheduled for October 18 – 20 in Las Vegas.

11 Adjournment

Dick Thompson made a motion to adjourn and Bob Dagger seconded the motion. The motion was approved by acclamation. The meeting ended at 10:00AM.

Floors Working Group Membership List at the End of the Meeting

| Name | Company | Representing | Voting Status | Int. Cat. |
|---------------------|---|---|---------------|-----------|
| Keith Sklar | Actors' Equity Association | Actors' Equity Association | O | G |
| Ken Greenwood | Actors' Equity Association | Actors' Equity Association | O | G |
| Bob Dagger | American Harlequin Corp. | American Harlequin Corp. | P | P |
| Fred Allen | Fred Allen & Associates | Fred Allen & Associates | O | U |
| Edward Paget | Jones & Phillips Associates, Inc. | Jones & Phillips Associates, Inc. | O | G |
| Nevin Kleege | Kleege Industries | Kleege Industries | O | G |
| Seth Popper | League of American Theatres and Producers, Inc. | League of American Theatres and Producers, Inc. | O | G |
| Gary Justesen | Oasis Stage Werks | Oasis Stage Werks | A | P |
| Tim Hansen | Oasis Stage Werks | Oasis Stage Werks | P | P |
| Tim Cox | PLASA | PLASA | P | G |
| Michael Sean Graves | Rosco Laboratories | Rosco Laboratories | P | P |
| Jerry Gorrell | Theatre Safety Programs | Theatre Safety Programs | P | U |
| Mark Elliott | Walt Disney Co. | Walt Disney Company | O | U |
| Steven Wiese | Wenger Corp. | Wenger Corp. | P | P |

Voting Status

- O Observer, non-voting
- P Principal voting on behalf of an organization or company
- A Alternate voting member representing an organization or company
- I Individual voting member representing no entity other than him or herself

Interest Category

- G General Interest
- U User of floors or flooring products
- P Manufacturer of floors or flooring products