#### LOG OF MEETING

SUBJECT: ASTM F08 Committee Meeting

**DATE OF MEETING:** November 19-21, 2003

DATE OF LOG ENTRY: December 11, 2003

PERSON SUBMITTING LOG: George F. Sushinsky

LOCATION: Marriot Waterside

Tampa, FL

CPSC ATTENDEES: George Sushinsky

NON-CPSC ATTENDEE(S): Members and guests of ASTM F08 Committee on Sports

Equipment and Facilities. Attendance lists for some meetings are included in the Appendix. Others were not

available at the time of this report.

### SUMMARY OF MEETING:

Staff from the Mechanical Division (LSM) in the Directorate for Laboratory Sciences (LS) of the U.S. Consumer Product Safety Commission (CPSC) attended various task group and subcommittee (s/c) meetings in part or in full during the 4-day meeting. They included:

- ASTM F08.63 on Playground Surfacing Systems (s/c meeting)
- ASTM F08.17 on Trampolines (Task Group and s/c meeting)
- ASTM F08.30 on Fitness Products (s/c meeting)
- ASTM F08.53 on Headgear –(Task Group on Soccer Headgear)
- ASTM F08.53 on Headgear and Helmets (Shirtsleeves Meeting)
- ASTM F08.65 on Synthetic Playing Surfaces (Task group on Soccer Surfaces)
- ASTM F08.12 on Gym and Wrestling Mats (s/c meeting)

ASTM F08.63 on Playground Surfacing Systems - S/C Meeting, Robert Heath, S/C Chairman - (11/19/03

The meeting was called to order at 8:00AM. Introductions were made, and a timekeeper was appointed. The minutes from the May 2003 meeting were approved with a minor editorial change.

#### Organizational Updates:

Designated subcommittee members gave updates from five groups involved with playgrounds and equipment. The groups represented included:

EXCEPTED BY: PETITION

\_\_\_ WITH PORTIONS REMOVED

- International Playground Equipment Manufacturer's Association (IPEMA)
- U. S. Consumer Product Safety Commission (CPSC)
- Canadian Standards Association (CSA)
- ASTM F15 play equipment standards F1487, F1544, F1918, and F1148
- National Program for Playground Safety (NPPS)
- National Playground Safety Institute (NPSI)

The CSA report by Rolf Huber noted that as of June 2003:

- Table 1 (critical heights of materials) was deleted from the CSA standard (CSA Z614).
- Playground materials now need to be tested according to ASTM F1292 or EN1177.
- The CSA further recommends: field testing for playground surfaces, annual inspections of playground surfaces at day care centers, and measuring equipment height from the top of the guardrail.

The CPSC report by George Sushinsky discussed new and continuing CPSC projects including:

- The Home Playground Handbook,
- Revision of the Public Playground Handbook, and
- New projects on indoor surfacing and long-bone injuries.

Mike Hayward reported that a revised version of ASTM standards F1487 (Public Playground Equipment) is to be published. He also reported on the progress of ASTM F15.44 to develop a standard for the under-two years old population. The draft standard (Dated November 16, 2003 does not require surfacing around equipment with designated play surfaces of 18 inches or less in a supervised indoor or outdoor setting. The standard also deems "hard" and "abrasive" surfaces such as concrete and asphalt as "unacceptable". Ballot results will be discussed at the F15.44 meeting in January. George Sushinsky reported that he provided some data to F15.44 showing critical heights of common indoor surfaces. Critical heights of 5-inches or less were measured for carpet on concrete, vinyl tile, and exercise mat on vinyl tile, concrete, and asphalt.

Walt Henderson reported that the NPPS was conducting another playground survey with the results to be released in April. NPPS also has a \$500K grant to install rubber tiles in playgrounds and to monitor play activities and injuries.

There were no formal reports from the other groups.

Robert Heath and Eloise Bird briefly discussed an issue in California regarding the accessibility of engineered wood fiber (EWF) surfaces. EWF surfaces require maintenance and upkeep to retain their accessibility characteristics. A task force headed by Eloise Bird was formed to address the concerns of the California Department of State Architects (DSA).

Jim Olshefsky, ASTM F08 liaison, discussed proficiency testing and how it would need to be done to certify labs and individuals to the revised requirements of ASTM F1292. Thirty participants will be needed. ASTM would help set up the program.

### Review of F08 main committee ballot of F1292:

Negatives and/or comments were received from eight people on the subcommittee ballot for revisions to ASTM F1292 Impact Attenuation of Surfacing Materials within the Use Zone of Playground Equipment. One negative, from Scott Belair, was withdrawn after discussion at the meeting. The subcommittee members present found the other negatives non-persuasive. Many of the negatives suggested editorial changes. These and the suggested editorial comments were generally adopted. It was left to the task group to include the editorial comments in the standard before it is issued.

#### Standard Guide (F2223) Comments

Rolf Huber presented a list of recommended editorial changes to ASTM F2223 – <u>Standard Guide for ASTM Standards on Playground Surfacing</u>. Some of the changes are required because of changes to ASTM F1292. Mr. Huber agreed to draft his changes to ASTM F2223 for the next ballot cycle,

#### New Business:

Robert Heath suggested that a group be formed to develop a standard for poured in place (PIP) surfaces. Rolf Huber and Richard Hawley were tasked with developing a guide and a separate specification. Other unitary surfaces would not be part of the document(s).

The meeting was adjourned at 1:20 PM. The next meeting is scheduled for the week of May 18, 2004.

## ASTM F08.65 on Synthetic Playing Surfaces - (Task group on soccer surfaces) (11/19/03)

A proposed standard for impact of indoor soccer surfaces received so many negatives last year that it was withdrawn. The task group chairman, Robert Anderson, proposed that the standard be modeled after ASTM F 1936-98 – Shock Absorbing Properties of North American Football Field Playing Systems as measured in the Field. Besides the editorial substitution of "soccer" for "football", the new draft differs from the original ballot in two major ways. The shock attenuation characteristics will prescribe a peak G measurement of 200 at the test points and the test points will be amended to be suitable for both indoor and outdoor fields with various dimensions. The changes address the primary comments on the original draft. This draft originally had field classifications with allowances for peak G readings up to 300. There would also be cross-references for testing fields that had multi-sport uses. There was a long discussion of the firmness required by the different sports.

ASTM F08.53 on Headgear –(Task Group on Soccer Headgear – Dennis Piper, leader) (11/20/03)

A draft ballot of the proposed soccer headgear standard received seven negatives. A negative

from Jerry Brettig concerning consistent coverage was found persuasive and the draft standard was withdrawn. The other negatives and comments were discussed. Several ideas were advanced including the need to specify the ball, consideration of the concussion value for peak G (98 + /- 20 Gs) based on the NFL study, instrumentation, head forms and lesser issues.

## ASTM F 08.17 on Trampolines (Task group meetings) (11/20/03)

Padding Task Group - John Kuchno substituting for Bud Nichols, leader - (11/20/03)

The meeting started at Noon with introductions and approval of the minutes from the May 2003 meeting. Bud Nichols had sent task group members a draft proposal for a replacement section to 6.3.1 of ASTM F381-01 – Components, Assembly, Use, and Labeling of Consumer Trampolines. The draft proposed an outward pull test on the inner diameter of an assembled pad to test the ability of the pad to return to its approximate original position when the force was released. Phillip Aja (A J Landmark – producer) opened the discussion of the proposal by suggesting that the hook end opening of the proposed test fixture be larger. Several task group members agreed with the suggestion. David Dick recommended that the width of the fixture be larger to simulate the chest breadth of a 12-year-old child. George Sushinsky also suggested widening the grip end of the fixture to simulate the gripping width of a 12-year old. Task group members agreed with the suggested fixture modifications. Mark Daniels agreed to redraw the test fixture as necessary.

George Sushinsky commented that the proposed test appeared to be appropriate. However he suggested that 6.3.1 was intended to measure different properties of the pad attachment system, therefore, the new language should also accommodate a test of the strength of the pad attachment system, not as a replacement to 6.3.1 but in addition to 6.3.1. He suggested that the language in the proposal be used to modify the way the test is conducted in 6.3.1. He volunteered to redraft the language for the test requirements. The task group agreed to the suggested changes pending subcommittee approval. The meeting adjourned at 1:15 PM.

Enclosure task group - John Kuchno substituting for Bud Nichols, leader - (11/20/03)

The meeting started at 1:30 PM with introductions and a review of the minutes. Five negatives were received on the subcommittee ballot to amend the entrapment requirements Three were found to be non-related or without an actionable issue. The negative from David Dick was found persuasive. All were in agreement that the balloted revision needed to be withdrawn primarily because in drafting the language a line of type was omitted. Mark Daniels offered revised language in the use of the torso and head probes to measure entrapment in the enclosure above the trampoline bed. The language was based on existing language in several children's product standards. He agreed to draft the new entrapment requirement for presentation at the subcommittee meeting.

ASTM F08.17 on Trampolines (Subcommittee Meeting) – John Kuchno, Chairman (11/21/03 9:00 AM to 12:00 Noon)

The meeting was called to order at 9:00 AM. Introductions were made and the minutes were approved without change. John Kuchno discussed various administrative items such as ballot deadlines.

### Trampoline Enclosures - John Kuchno, leader

John Kuchno opened the meeting with consideration of the negatives received on the ballot. Two (from Barbe and Nichols) were found non-related. A negative from Jensen had no actionable issue and would be subsumed in the other negatives. The negative from David Dick was found persuasive. After the formal vote the negative from John Kuchno and the comments from George Sushinsky were withdrawn.

Mark Daniels discussed how the requirements would be amended in the next ballot. Technical difficulties prevent the subcommittee from seeing a redrafted requirement for the entrapment provisions. Bud Nichols expressed some concerns with the scope of the requirements developed at the task group meeting. The task group suggested that the entrapment requirements apply to both the inside and outside of the enclosure. The redrafted entrapment requirements would be placed as a work item on the ASTM web site for comment before submittal as a ballot item.

Ron Gilbert brought up an issue that related to the use of the "safety" when applied to the enclosure. He is concerned that use of that term by manufacturers and retailers could imply that the trampoline is safe to use. John Kuchno requested that he prepare language for the subcommittee to consider as a change to the standard.

Padding task group report - John Kuchno, leader

Mr. Kuchno summarized the activities of this group. George Sushinsky outlined the changes agreed upon at the task group meeting. The padding test will consist of two parts (return to position after application of an 85-lb. load and a pad retention system strength to failure). Several good suggestions were made to add a more quantitative evaluation for the pad retention test. Mr. Sushinsky was tasked with drafting language for consideration. This would be placed as a work item on the ASTM web site for comment before submittal as a ballot item.

Other issues considered changes to F381 to remove redundant language from the labeling requirements for the height of the trampoline, and to strengthen the statement about the use of the trampoline for children less than 6 years of age from "not recommended" to "prohibited".

Joe Burchfield suggested adding minimum requirements for the fabric used in the trampoline bed. A task group was formed to prepare requirements.

Ron Gilbert asked if floating trampolines should be covered by F381, since they are shown in use on land in their advertising. The task group working on the floating trampoline standard will need to address this issue and the subcommittee may need to amend its scope to exclude floating trampolines because of their unique construction.

The meeting was adjourned at 12:00 PM.

ASTM F08.30 on Fitness Products - S/C meeting, Harv Voris, S/C Chairman (11/21/03 from 10:55 to 11:15 AM)

George Sushinsky dropped by the meeting to pick up documents handed out to the s/c members. The documents were examples of exercise equipment intended for children up to age 14. The subcommittee is concerned that such equipment does not have the spacing or guarding requirements of equipment built to the ASTM standard for fitness equipment intended for adults. The subcommittee decided to work with ASTM F15.22, subcommittee on children's products to develop standards for these products. The fitness subcommittee asked if the CPSC data could differentiate injuries to children based on the type of the equipment and whether the injury was from use of incidental contact.

ASTM F08.53 on Headgear and Helmets – Shirtsleeves Meeting for Headgear, Randy Swart, leader (11/20/03 from 2:30 to 4:00 PM)

Mr. Sushinsky attended the meeting from 2:30 until 4:00 PM. During this time, the following topics were discussed.

- Roll-off tests of helmets (F1446)
- Visors on equestrian helmets
- Projections inside helmets
- Test for durability of labeling (F1446)

It was universally agreed that the pass/fail requirement in the rearward roll-off test of F1446 needed revision. Some helmets may be judged to pass only because the equipment restricts their movement and prevents them from coming off the headform. Dave Halstead and others agreed to serve on a task group to revise the test's failure criterion.

The other F1446 item (label durability) is also a requirement without an objective means of determining compliance. Another task group was formed to work on defining the failure criterion for the requirement. Both adhesion and legibility will be considered.

The complete task list developed from discussions at the shirtsleeves meeting and the subcommittee meeting can be seen at <a href="http://www.helmets.org/astmdocs/0311task.htm">http://www.helmets.org/astmdocs/0311task.htm</a>.

ASTM F08.12 on Gymnastics and Wrestling Equipment - Roger Schmidt, Chairman - (11/20/03 from 4:00 to 5:00 PM)

George Sushinsky attended this meeting in response several consumer inquiries about gym mat surfaces under play equipment and for possible information about indoor surfacing. The meeting was wholly concerned with the development of a new standard for wall padding – also a topic of several consumer inquiries. The chairman led the discussion that centered upon developing a standard based on F1081 (for Competition Wrestling Mats). G levels would stay at the traditional value of 200 for a failure. Bill Farrell stated that high school basketball

players attain a speed of 10 to 12 mph. This establishes the velocity that the missile will need to be dropped onto the padded surface. The "A" missile from F355 will be used.

#### **Attendance Lists:**

## ASTM F08.63 on Playground Surfacing Systems - (s/c meeting)

(Members)

Kert Artwick Robert Akins

Scott Belair Paul Bamburak

Mike Hayward Flouise Bird Ted Ilges

Robert Heath Walter Henderson James Olshefsky Michael McGuffie

Rolf Huber Julie Sarada

Martyn Shorten Keith Shelton Randy Watermiller

George Sushinsky

Jason Tinling

(Visitors) Paul Elliot

Martine Mientes

David Splane

Richard Hawley

Thomas Siebert

Curtis Cleveland

## ASTM F08.17 on Trampolines - (Task Group and s/c meeting)

(Members)

Phillip Aja (Padding and Enclosure Task groups and S/C meeting)

Joe Burchfield Jr. (Padding and Enclosure Task groups and S/C meeting)

Scott Burton (Padding and Enclosure Task groups and S/C meeting)

Mark Daniels (Padding and Enclosure Task groups and S/C meeting)

David Dick (Padding and Enclosure Task groups and S/C meeting)

Way Johnston (S/C meeting)

Kevin Jung (Padding and Enclosure Task groups and S/C meeting)

John Kuchno (Padding and Enclosure Task groups and S/C meeting)

Lani Loken (Padding and Enclosure Task groups and S/C meeting)

Steve Moulton (S/C meeting)

Todd Murdock (Padding and Enclosure Task groups and S/C meeting)

Bud Nichols (S/C meeting)

Tom Plante (Enclosure Task group and S/C meeting)

Gary Reynolds (S/C meeting)

George Sushinsky (Padding and Enclosure Task groups and S/C meeting)

(Visitors)

Ron Gilbert (Enclosure Task group and S/C meeting)

Laurel Jensen (Enclosure Task group)

Randy Johnston (Padding and Enclosure Task groups and S/C meeting)

### ASTM F08.30 on Fitness Products - (s/c meeting)

(Members)

Dave Dyer

Mark Granger

Steven Hipke

Luarel Jensen

Harv Voris

Steve Wendt

(Visitors) Steve Lenz

Steve Sudanek

George Sushinsky

### ASTM F08.53 on Headgear -(Task Group on Soccer Headgear)

Attendance list is not yet available.

# ASTM F08.53 on Headgear and Helmets - (Shirtsleeves Meeting)

(Members) Mike Ableman J Scott Delaney Mark Granger Thad Ide Larry Maddux Daniel Pomerening John Sabelli Jaques Tholin	Garnet Alexander Ed Dixon Nancy Grossbart Steve Keller Thom Parks Charles Powell Dave Spenciner David Thom	Roy Burek Tom Douglas P D Halstead Nelson Kraemer Dennis Piper Sid Roslund Chris Swanson Chris Withnall	Eric Darnell Dean Fisher Eric Hostetler Joe Lunny Frank Plastino David Rudd Randy Swart Isabel Wright
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(Visitors) Christine Bannon-Rodrigues		Trish Bare V F Laperriere	Bill Brine Dennis Lia
Mel Cook  Matthew Pfeffer	Lawrence Grodsky Michael Pilate	Brian Sidwell	Michael Taylor

ASTM F08.65 on Synthetic Playing Surfaces - (Task group on Soccer Surfaces) Attendance list is not yet available.

ASTM F08.12 on Gym and Wrestling Mats – (s/c meeting) Attendance list is not yet available.