LOG OF MEETING
DIRECTORATE FOR ENGINEERING SCIENCES

SUBJECT: ASTM Subcommittee meetings on Protective Headgear (F8.53) and Playground Surfacing (F8.63) and Bicycle Accessories (F8.19)

DATE OF MEETINGS: May 21-22, 1996

PLACE: Harvey Airport Hotel, Atlanta, GA

LOG ENTRY SOURCE: Scott Heh, ESME

DATE OF ENTRY: June 12, 1996

COMMISSION ATTENDEES: Scott Heh-ESME

NON-COMMISSION ATTENDEES: Available upon receipt of meeting minutes

SUMMARY OF MEETINGS

Subcommittee F08.53 - Headgear

The subcommittee discussed negative votes and comments received responding to recently balloted new headgear standards and revisions to existing standards.

Recreational Roller Skating Headgear

This proposed new standard incorporates the same tests and criteria as the ASTM bicycle helmet standard (F1447). However, it will be a separate ASTM standard. Manufacturers will have the choice of certifying to either the bike helmet standard, the roller skating helmet standard, or both standards. By keeping the standards separate, the roller skating helmet standard can be easily revised if future information suggests that roller skating helmets should meet requirements that are different from bike helmet requirements.

The subcommittee discussed whether roller skating helmets should meet different requirements than bicycle helmets. The majority of attendees felt it should remain linked to the ASTM bike helmet standard test methods and criteria. However, the subcommittee also agreed that the roller skating helmet standard should require warning labels on the helmet that state the helmet is not intended for "free-style" skating or roller hockey. The roller skating helmet standard will be rebalanced with these warning requirements.

Skiing Headgear

A proposed new ASTM skiing headgear standard was discussed. The proposed standard is similar to a European (CEN) standard for skiing headgear. Some subcommittee members believed that skiing headgear should meet more rigorous requirements than the CEN standard. The majority of the subcommittee voted that there is no evidence that ski helmets meeting the CEN standard are inadequate and that it is beneficial to align the ASTM ski headgear standard with CEN. The new ASTM Skiing Headgear standard will move forward for ASTM society approval.
Baseball Face Protectors and Baseball Helmets

The task group reported that they have drafted revisions to ASTM F910 - Face Guards for Youth Baseball. However, due to unforeseen circumstances, the proposed revisions did not get submitted on a subcommittee ballot. The subcommittee chairman assigned the task group to prepare the proposed revisions and submit them to ASTM for a subcommittee ballot by August 9.

The task group is also exploring whether ASTM should undertake the development of a baseball batting helmet standard. The task group is assigned to distribute and review a NOCSAE standard and a Japanese standard for baseball batting helmets.

Bicycle Headgear

The subcommittee approved revisions to the procedures for marking the impact test line and testing for retention system strength. These revisions will go forward for main committee ballot.

Revisions to a proposed new test method for positional stability were discussed and approved by the subcommittee. The new test method will be balloted concurrently at the main and subcommittee levels.

Infant Toddler Bicycle Headgear

The subcommittee discussed negative votes and comments on a proposed new standard for bicycle helmets used by infants and toddlers. There was discussion over whether the impact attenuation criteria should be 250-g or 300-g. Most of the subcommittee members believed that it is better not to change too many variables at one time when developing infant/toddler headgear requirements. The majority of the subcommittee members also agreed that a reduced headform mass (3.2 kg for size A and 4.0 kg for size B) should result in helmets that are better suited to protect toddler heads than helmets tested with a 5.0 kg headform. Given the smaller headform mass, the subcommittee voted to maintain the same 300 peak-g requirement as the adult standard. The proposed new infant/toddler headgear standard will move forward to main committee ballot.

Proposed new standard for Use of Retroreductive Materials on Bicycle Helmets

The subcommittee discussed many negative votes and comments on this proposed new standard. Some manufacturers believed that the proposed standard was design restrictive. Other manufacturers stated that retroreflective tape of the grade required to meet the proposed standard is not available in a form that can be easily applied to the helmet shell during the production process. Related comments suggested that a retroreflective requirement would be too costly. The subcommittee agreed that retroreflective material manufacturers should work with the helmet manufacturers to address these issues before the standard is proposed again for subcommittee approval.
Subcommittee F8.19 - Bicycle Accessories

This group is in the early stages of developing a standard for bicycle trailers for child passengers. They are working on requirements for stability, system fatigue, passenger compartment characteristics, restraint system, warnings and labels, etc.

Subcommittee F8.63 - Playground Surfacing

The subcommittee reported the status on the development of a standard for playground surface accessibility to disabled persons. Independent testing is now being conducted to develop test methods and requirements for surface irregularity, surface penetration, and maneuverability. The subcommittee expects to have a draft accessibility standard ready for review by September, 1996.

The subcommittee discussed the benefits that would be gained if a hemispherical impact test missile were allowed instead of the ANSI C headform currently specified in the F1292 standard for impact attenuation of playground surfaces. The current standard calls for the ANSI C headform and a guided (monorail or twin-wire) drop system. This is appropriate for a laboratory setting, but is unwieldy for field testing. If a hemispherical impact missile could be used with a tri-axial accelerometer, a much simpler test device could be used to test impact attenuation performance in the field. The subcommittee assigned a task group to undertake round-robin testing to compare and correlate a hemispherical/tri-axial system with the ANSI C/guided/uniaxial system.

The subcommittee agreed to begin development of a list of recommended methods to test flammability characteristics of playground surfacing materials. This would not be a performance specification, only a list of recommended test methods.

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