

**Equipment & Facilities Specifications Subcommittee annual meeting
Virginia Beach, VA
2 DEC 2010**

Bob Springer opened the meeting at 1500 and greeted the 48 attendees. The following committee members were present:

Win Eggers
Bruce Long
Tim Edwards
Jim Skelly
Richard Messenger

1. Meeting Minutes: Last year's EFSS meeting minutes were approved (Appendix A).
2. Agenda: The agenda for this meeting was read and approved (Appendix B).

Old Business

3. Action Items: There was no action item status to review, except for Part 2 of the Cleaner & Solvent Report, which is a separate agenda item.
4. Goals: This year's goals were to write and release two newsletters, which were successfully accomplished.
5. Implement Problems & Reports:
 - a. Bob presented a summary (Appendix C) of implement weigh-in reports that were received during 2010. A brief discussion ensued, focusing primarily on problems encountered with hammer handles. In summary, most hammer handles are manufactured quite close to the 110 mm maximum length specification, and many of them stretch during use beyond the legal limit. For example, 13 of the new meet-provided hammer handles at Sacramento for the Masters and JO meets were longer than 110 mm (right out of the box). Six had stretched beyond legality by the end of the Masters meet, including one on a 2 kg hammer.
 - b. Weighing scale accuracy was discussed. Ivars Ikstrums summarized the weighing scale article which appeared in Newsletter 20-2. Scale accuracy is arguably the top measurement weakness that exists within the area of Weights & Measures. All Implement Inspectors were encouraged to have their scales calibrated, adjusted (if necessary) and certified once a year, prior to major meets, and if the scale may have been damaged. All Implement Inspectors were also encouraged to read the article on scales in EFSS Newsletter 20-2.

6. Cleaner & Solvent Report, Part 2:

Ivars extended the scope of last year's cleaner & solvent test, and reported on the latest results. One type of marker, in particular, was notably more difficult to clean off after exposure to one summer's worth of temperatures. However, the results regarding cleaner/solvent compatibility with different implement surfaces did not change. Summaries of both tests were distributed to those in attendance. Newsletter 20-2 contains the links to the complete reports. Ivars will also see about posting the reports to the USATF best practices web page.

One driver for this investigation was the weigh-in experience in Fayetteville during the NCAA 2009 outdoor finals. Some implements literally didn't have room for more certification markings. And some implements were misrouted due to similar or confusing certification markings.

New Business

7. 2011 Proposed Rules Changes: Bob led the discussion, summarizing the changes that would affect equipment and facilities. The main changes, which concern the committee, are described herein.

Item 65 partially rewrites the mini-javelin specifications. The 300 and 400 g mini-javs remain unchanged. The 500 g mini-jav is given new dimensional specs. The 600 g mini-jav is a new implement, and has the same dimensional specs as the new 500 g mini-jav.

Item 66, redefinition of the throwing weight head, drew considerable discussion, particularly as it pertains to the indoor weight. The issues of complete vs. partial head fill, CG offset and available plastic head sizes were discussed. The committee decided that we have insufficient information from which to make an adequate recommendation. Accordingly, the recommendation was made to table this item.

Ivars took an action item to perform a technical evaluation of air gap in the head vs. CG offset.

The rationale for Items 67 & 68 was explained. The intent is to make the throwing weight handle and link rules more workable in the field for purposes of inspecting and repairing the weights.

Item 69 incorporates the ultraweight pentathlon rules into the main rule book. Discussion ensued to modify the wording which defines the handle, which was accepted.

The committee voted to recommend approving all the implement & facilities-related rules changes, except Item 66.

8. Preliminary Report on Hurdle Pullover Testing

Ivars made a presentation on the methodology, test equipment and summary results of this investigation. Hurdles were tested in the Pacific Northwest region and at Sac State during 2010 to determine how many, and what type, of hurdles comply with IAAF and USATF pullover specifications (Rule 168.5).

Graphs were presented of pullover force at all height settings for 204 hurdles, plus sixteen 27" Masters hurdles. Automatic, manual and fixed mass hurdles from five manufacturers were tested. This testing occurred in locations of opportunity where Ivars was coincidentally working meets; therefore, not all hurdles were tested at most locations due to time constraints, but sufficient data were gathered to show the significant trends. The testing consisted of a slow, continuous horizontal pull, recording the maximum attained force.

A number of the measured hurdles fell between the required 3.6 and 4.0 kg-f. But most did not for various reasons. Of concern are those instances where a facility uses a mixture of hurdles that are both low- and high-out-of-spec: This arguably will present a large range of pullover resistances to the runners.

[Following the meeting, an attendee questioned the geometry of the pulling force that was applied to the hurdles during these tests. The argument was made that the pullover force should always be held perpendicular to the hurdle uprights. However, USATF Rule 168.11 and IAAF Rule 168.2 both specify the application of a horizontal force, which is how the tests were performed.]

9. Goals for 2011:

- publish two newsletters
- get a larger room for the next meeting

10. Action Items for 2011:

- Perform additional study of the characteristics of the indoor throwing weight head. Ivars will analyze the dependency of CG offset vs. fill factor of the head.

Ivars Ikstrums
acting secretary

Appendix A: 2009 Meeting Minutes

Minutes of the Equipment & Facilities Specifications Subcommittee, December 4, 2009, Indianapolis, Indiana

The meeting was called to order at 4:30PM.

Members present were Bob Springer, **Error! Reference source not found.**, Tony Wayne, Bruce Long, Win Eggers, Jim Skelly, Richard Messenger as well as the newsletter editor, Ivars Ikstrums. There were 40 guests in attendance as well.

The minutes of the 2008 meeting were approved as presented.

The agenda was approved as presented.

Bob Springer reported that two newsletters had been published in the last year. The September issue was the first done by the new editor, Ivars Ikstrums.

There was a discussion of implement problems over the last year. The biggest problem was distinguishing older marks on some implements at the NCAA D-1 Outdoor meet. This led to a discussion of methods of marking implements. Some preferred to use sticker that were customized to the meet. Others pointed out that this could be a problem for discus throwers, as a label on the top surface of the discus would be felt by the thrower. The agreement was that these should only be placed on the bottom surface of a discus.

Another problem that was mentioned was the redesign of the turbo javelin. Evidently there are some on the market that do not comply with the rules.

Ivars Ikstrums led a discussion on the use of cleaners and solvents to help remove some of the older marks. This was a preliminary report and will be followed up next year.

There was a brief discussion of the new box collars that Gill is selling.

Rules changes impacting on the committee were discussed. The major unanswered question was the size of the shot to be used by the sub-bantam group.

The goals for 2010 will be to publish two newsletters; one in February and one in September. Members and guests are also encouraged to send in reports from meets detailing the implements impounded and the reasons.

A question was raised about whether our marks on a javelin could affect the balance point. No answer was found.

Appendix B: 2010 Meeting Agenda

**National Officials Committee
USA Track & Field
Equipment & Facilities Specifications Subcommittee**

Virginia Beach 2010 Agenda

December 2, 3:00 pm- 4:50 pm, Thursday

Introductions

Approval of 2009 Meeting Minutes

Agenda Review and Approval

Old Business

Status of Action Items/Goals from 2009

Implement Problems/Reports in 2009

Updated Report on Cleaners and Solvents

New Business

Rules Changes for 2011

Preliminary Report on Hurdle Pullover Testing

Goals for 2011

Action Items for 2011

Appendix C: 2010 Implement Inspection Report

Summary of Reports

		Total	Rejected	Per Cent
Indoor Shot	Men	40	6	15.00%
	Women	33	2	6.06%
Outdoor Shot	Men	186	9	4.84%
	Women	175	10	5.71%
Discus	Men	367	11	3.00%
	Women	340	9	2.65%
Javelin	Men	234	8	3.42%
	Women	235	4	1.70%
Hammer	Men	135	25	18.52%
	Women	175	12	6.86%
Weight	Men	35	1	2.86%
	Women	28	2	7.14%
		1910	91	4.76%

Combined Events

		Total	Rejected	Per Cent
Indoor Shot	Men	12	1	8.33%
	Women	16	0	0.00%
Outdoor Shot	Men	49	13	26.53%
	Women	66	13	19.70%
Javelin	Men	94	12	12.77%
	Women	113	14	12.39%
Discus	Men	102	14	13.73%
		452	67	14.82%

Conclusions: As expected combined events implements tend to be worse than Individual events. Shots and hammers tend to be the worst ones, but the Men's Hammer number is skewed due to a large number of handle problems at one meet. That meet had 19 hammers with handle problems. Without those the Men's Hammer would have had a failure rate of 4.44%.