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The Equipment and Facilities Specifications Newsletter

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WELCOME TO NEW SUBSCRIBERS

This Newsletter has been sent semi annually as an educational tool to Weights and Measures, Technical Managers and interested Throws Officials, and certification chairs for fifteen years. **This is the last copy you will receive unless you are recertified as a W&M Officials, a Technical Manager, a certification chair or have let me know that you are interested in continuing to receiving it. You will be removed if 1) you find a note above the newsletter if you are receive it by email or 2) see the word "remove" at the bottom of your address label if you receive it by mail.** Welcome to our new subscribers.

First	Last	Association
K.B.	Gupta	
Robert	Hoisington	Minnesota
Arnie	Mayer	
Martin	Olivares	Border
Hirschel	Pearson	Southern
Ralph	Teague	Georgia

IF YOU KNOW SOMEONE WHO COULD BENEFIT BY GETTING THIS INFORMATION, PLEASE SEND HIS OR HER ADDRESS or E-MAIL ADDRESS TO THE EDITOR. LIKEWISE, IF YOU ARE NO LONGER INTERESTED IN BEING ON OUR MAILING LIST, ALSO LET ME KNOW. FOR FASTER DELIVERY AND FOR UPDATES IN BETWEEN NEWSLETTERS SEND ME YOUR E-MAIL ADDRESS. IF YOU'RE GETTING THIS BY MAIL, I DON'T HAVE YOUR CURRENT E-MAIL ADDRESS.

E&FS's ANNUAL CONVENTION MEETING

The meeting was called to order by the chair, George Kleeman, at 5:35 in Portland, Oregon. The minutes of the 2003 meeting were corrected and approved. The

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agenda for the meeting, attached, was approved. Everyone introduced themselves and their interest in attending the meeting.

OLD BUSINESS

Two newsletters were sent out by George during the year.

Tony Wayne sent in a report about implement problems at the meets he worked in North Carolina.

Measurement Problems

There was a general discussion as to the most common problems found with implements and measurements during the year----

Hammer: too light or too long

Javelin: center of gravity

Discus: rough edges, some of the Polish discuses are too thick.

Shot put: too light. The junior high implement is now 4 kg. The 8% to 9% of the turbo javelins are not passing specs because they are made to the old specifications.

It is recommended that high schools or anyone ordering implements should never pay for the implements until they have passes a Trackmaster™ or similar inspection by the buyer.

When using a fiber glass tape, always check for the zero mark. If the zero mark is not at the end, it is easier to fix if it breaks.

IAAF Report by David Katz

David brought two books that he highly recommends for a weights and measures library---The Referee Book and the IAAF Track and Field Facilities Manual. They are published by IAAF and available on line under publications.

Pole Vault: David presented the soft box idea that was discussed last year to the technical committee and he was told no.

If you want to certify your track contact Duffy Mahoney at the USATF office first for a list of surveyors that are specialists in track. They can be expensive. The IAAF has two levels of track certification old and new.

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4 Updated W&M Manual

George commented that recertification tests for W&M are available. They should have been sent to all the Certification Chairs as part of the recertification package from Jim Flanik. If you need a copy, write George.

NEW BUSINESS

Rules: George explained the addition of an Electronic Measurement Judge in Rule 137. The other rules related to the committee's business that were recommended to be amended were: 149, 160.1, 180.18, 180.20, 181.21, 185.7, 187.8 through 187.33, 187.24, 190, 191.7, 191.8, 201.4, 264.1, 264.5, 300, 300.1, 302.4, 302.5, 302.6, and 332.3. Many were just reordering but a few were new implements (i.e., the Ultra-weights at 98, 200 and 300 lbs.) and the change in sector size for youth to 34.92 degrees. George comments that the specifications for the new hammer handle were being delayed until January, 2006. He described some of the tests which had been done to date by the IAAF.

Facilities Management:

That led to a discussion about how to get straight sector lines using tape. Details of how to properly lay down tight tape are in the Technical Manual. A hint is to stretch the line out as far as you plan mark and then pull out another 5-10 feet before you staple along the line. After properly fixing both ends then walk back in and staple every 15-20 feet along the way.

To help with circles that are in the corner of fields, the suggestion was made to put a center of the sector line at the back of the circle to help the athletes get properly aligned with the cage and sector.

Goals:

Who wants to remain on the committee?

What should the committee be focusing on in 2005?

1. Measurements

Do we need to set up a statistical base of why implements that have failed?

Wind gauges Do we need to check the new ones for more stability?

Is there a tape measure on the market that is left handed or right handed so officials won't have to read the tape upside down?

2. Facilities

Do we need to set up a data base of facilities in the Unites States?

There were no definitive goals set.

Before the adjournment there was a discussion about a new invention used to retrieve shot puts effectively at the USATF Olympic Trials in Sacramento. The device is made up of three 20 foot sections of 6 inch corrugated flexible irrigation piping. The piping had groves on the outside but was smooth on the inside. The end of the pipe farthest from the circle was raised about 2 feet by a wooden stand.

The shots rolled back to the athletes silently. The catch basin by the circle was not connected to the piping so that

stopping the shots did no make the pipe move. All officials and athletes thought this idea was wonderful.

The meeting was adjourned at 7:30.

Submitted by Win Eggers, Secretary

THE TRAINING CENTER

This is a regular feature of this newsletter, where we discuss the method of measuring an implement, venue or a track facility. Your comments or areas of interest are welcome. It is through this kind of dialogue that we learn from each other and improve our skills. Send the editor your stories and questions. The IAAF now has their approved equipment list on line at the following address: <http://www.iaaf.org/downloads/type=publications/index.page=2.htm>.

The implement for this month is the weight since it is generally thrown indoors.

As such it is not defined as an IAAF implement. The specifications for this implement are shown only in the USATF, WMA and NCAA rulebooks. There are six weights for the Weight, from 12 lbs. to 56 lbs. Internationally they are defined as shown in the table below. Unfortunately as with other implements there are some slight differences between the three books. And now are three more have been added as Ultra Weights for the Weight Pentathlon. They are 98, 200 and 300 lbs. The specifications for these heavier Ultra Weights are different from the Weights. The Weight implement consists of three parts: the head, the handle and a connection. USATF and WMA defines the head is a solid sphere made of iron or other metal not softer than brass or a shell filled with lead or another solid material so no internal movement is detectable. It should be spherical and smooth. If there is a filling it must be inserted such that it is immovable and the center of gravity is not more than 9 mm from the center of the sphere which can be tested using an 18 mm in diameter sharp edge stand like the hammer device for the Trackmaster™. That spec is true for all WMA implements. In USATF meets where indoor implements must be used an implement with a synthetic covering and with internal movement can be used. If the synthetic covered implements are spheres, they must be no more than 15 mm larger in diameter than the corresponding metal implement. Weight bags have no diameter requirement.

The NCAA defines the head as a solid sphere made of metal not softer than brass or of a shell made of plastic or other suitable material but not rubber. They give no specification for the ball diameter or any specification on internal movement although the following note on synthetic implement infers that internal movement for the solid implement is not allowed. Where indoor facilities dictate, synthetic-covered implements with internal movement may be used but homemade or modified implements are not allowed. Repairs may be made only with original manufacturer's replacement parts.

The USATF grip is a triangular shape and at least 12.7mm (1/2") in diameter. For USATF the side must be less than 184 mm on a side as an inside measurement. Handle must be rigid and not stretch when being thrown.

The WMA handle may be either a single or double loop but rigid and without hinging joints and cannot stretch appreciably while being thrown. No diameter is specified. The links to the handle must such that the handle cannot be turned to increase the length. A swivel may not be used for this connection.

The NCAA allows a maximum of 190 mm and a minimum of 100mm. If the handle can rotate within its connection to the ball or bag then it must be an equilateral triangle. If it can't rotate then it can be an isosceles triangle. Hammer handles are not allowed.

There is also a difference in the connection USATF specifies a maximum of two steel links or loops whose diameter shall not exceed 9.5 mm with the handle being connected to the links by a loop and not a swivel. The head can have a swivel which can be plain or with ball bearings. The NCAA allows the handle to be connected to the head by means of a chain link, links or steel line whose thickness shall be such that it cannot be stretched while being thrown. No dimensions are given. The connections to the handle and the ball are the same as USATF. WMA specifies use of links connected to the head by means of a swivel that can be plain or ball bearing.

The overall length of the complete implement as thrown, is 40.64 cm (16 inches) from the bottom surface of the head to the inside surface of the handle for both USATF and NCAA but 41.00 cm for WMA. The NCAA only specifies a men's 35 lb. and a women's 20 lb. implement. USATF has specifications for the 56, 35, 25, 20, 16 and 12 lb. weight. These are consistent with WMA specifications for Master's events.

Because of the differences in specifications there is one addition measurement for USATF meets, namely the ball diameter. A few of the following items can not be verified if a 'bag type' weight is used.

1. Check for internal movement. If an USATF meet, check for center of gravity conformance by balancing the ball on an 18 mm diameter orifice. This can not be verified for bag type weight.
2. Weigh the implement. Normally the weight is too heavy for mechanical Trackmaster™ scale unless you have brought special weights. The digital scale will not weigh the 56 lb. weight.
3. Check the overall length. (40.64 cm or 41.00 WMA.) When checking a bag type weight, watch for a large flat spot on the bottom of the bag. If this is evident, the weight should measure at least a half inch short as it will grow that much upon use. The best approach is to remove the flat spot prior to check-in.

4. Check the dimensions of the inside sides of the handle. Note the difference between the rulebooks.
5. Check the diameter of the handle and make sure it won't or isn't deformed.
6. If it is an USATF meet, check the diameter of the ball.
7. Check the connection, 2 or less loops, and diameter if USATF or WMA. More loops or wire if NCAA.
8. Check connection to the handle (just loop no swivel) and the ball (by a swivel if NCAA, option if USATF).
9. For safety, check for broken handles and connecting links.

Name	56#	35#	25#	20#	16#	12#
Min. kg	25.400	15.880	11.340	9.080	7.260	5.450
Diam mm min.	-	145	130	120	110	100
Diam mm max.	-	165	150	140	130	120

The new Ultra Weights have less definition and are only defined in USATF Rule 195.9 which says:

Ultra Weight: The implement consists of a weight with a handle. The overall length of the handle, from the inside surface of the grip to the body of the weight, shall not exceed 15.24cm. The minimum weights for the implements are: 98# - 44.50kg; 200# - 90.80kg; 300# - 136.10kg. There are no other specifications for the implement. Obviously, your normal scales or hammer length measuring devices won't handle these weights. I suggest you would have to use a shipping scale for measurement. Anyone have any suggestions?

APPROVED RULE CHANGES

This was a Rules Change year for USATF. There are a number of rules other than those discussed about that were accepted and impact us as W&M, throwing or Technical Managers.

The full list and text of rule changes is available on the officials' web site at www.usatfofficials.com under the Rules Chair. By the time you get this newsletter, an Acrobat copy of the rulebook will be available on the USATF.org website.

((Double parenthesis)) indicates removal. Underline indicates addition. The item numbers are those assigned by the Rules Committee for identification

Item 30 & 31 – Amend Rule 110.4 under Competition Officials to include Electronic Measurement Judge and define duties in Rule 137 & 143.1.

Item 35 – Amend Rule 149 as follows: No performance accomplished by an athlete shall be valid unless it has been made during a ((n official)) bona fide competition on a facility and (where relevant) using an implement which conforms to specifications set within these Rules.

Item 37 & 52 – Amend Rule 160.1 and 180.18 as follows: Define lane width outdoors and width of runway as 1.22m ± 0.01m (4 ft.)

Item 38 – Amend Rule 161.4 as follows: IAAF Starting blocks shall emit an acoustic signal if false start and automatic recall if available.

Item 39 – Amend Rule 162.1 as follows: The start of a race shall be indicated by a white line 5cm wide marked on the track or ground ((not more than 5cm wide)).

Item 53 – Amend Rule 180.20 as follows: The maximum allowance for inclination of runways for jumping events and the Javelin Throw shall not exceed 1:100 laterally and 1:1000 downward in the running direction. In the High Jump, the maximum ...

Item 57 – Amend Rule 181.12 as follows: ... The crossbar shall have no bias and, when in place, shall sag a maximum of 2cm for the high jump and 3cm for the pole vault.

Item 58 – Amend Rule 185.8 as follows: ...The upper part of the indicator board shall also be covered with a plasticine layer of contrasting color for approximately the first 10 ((3))mm and along its entire length. ...

Item 59 –Amend, Reorganize, and/or Consolidate Rules 187.8 through 187.33:

Item 60 – Amend Rule 190 as follows: **NOTE:** ((Although not required, an)) An effective Hammer cage should have ((the)) movable panels at the front. ...

Item 61 – Amend the first sentence of rule 190 as follows: It is ((recommended)) required that all Hammer, Weight, Superweight and Discus Throws be from an enclosure or cage to ensure the safety of spectators, officials and competitors.

Item 62 – Amend Rule 191.7 as follows: **Wire** – The wire shall be a single unbroken and straight length of spring wire not less than 3mm ((or No. 11 Standard Wire Gauge 2.95mm in diameter,))....

Item 63 – Replace the note in Rule 191.8 as follows: NOTE: Specifications for the hammer handle adopted by the IAAF prior to January 1, 2006 shall be adopted for the purposes of this rule.

Item 68 –Add a new Rule 202 to define the Ultra Weight Pentathlon and add new Rule 195.9

Ultra Weight: The implement consists of a weight with a handle. The overall length of the handle, from the inside surface of the grip to the body of the weight, shall not exceed 15.24cm. The minimum weights for the implements are: 98# - 44.50kg; 200# - 90.80kg; 300# - 136.10kg.

Item 88 – Amend Rule 302.5(e) as follows: In the Shot Put, Hammer, and Discus a ((40)) 34.92 -degree sector shall be used. See Rule 187. 24-29.

Item 103 –Amend the Superweight age group chart in Rule 332.3 (f).

I would be interested in knowing what equipment you use at your various schools. Last time I requested this information I got very little response. Send me a note so I can publish it next time. How many have their devices that they use? How many use Gill, Trackmaster™ (Original Red Meade, Balko or Daktronics) or some other? Email me at georgekee@aol.com.

If anyone is looking for odd tip-weights for the old Balko Trackmaster, David Post has few of the following: #'s 3, 9, 10, 11, 12 and 14 which is the one for the 56lb weight. He also have a complete commentary on the Balko Trackmaster™ which you can get by emailing him at JAVMAN7@aol.com.

CERTIFICATION

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ow do I become certified Weights and Measures Official, a Technical Manager or become recertified if I have let my membership lapse?

Currently USATF is the only organization having a national training and certification program for Track and Field officials (particularly in the area of Weights and Measures Officials or Technical Managers). You can become an USA Track & Field official by contacting your local association. To find out whom to contact, send the editor a note and he will send you the appropriate address. If you have Internet access, you can look at the Association's Web page, which is part of the USATF Website. It can be found at <http://www.usatf.org/about/associations.htm>. The Certification Chairs are also listed in the Officials' section of the web site. They are also on the officials' web page at www.usatfofficials.com under the Certification Chair, Jim Flanik. In addition to the paper work that your local association requires to become a certified official, your local Officials Chair can send you the Weights and Measures open book exam. This exam is intended to test you on your knowledge of W&M techniques and specifications so that you can be certified in this specialty. It covers all of the rulebooks. See the next article on the handbook. If you would like to have a clinic let the editor know. He can try to get some nearby clinicians to help out. Note all current officials have to be recertified for this Olympiad ending in October 2004. There is currently no test for becoming a Technical Manager. However, both specialties do have monographs which explain their duties. If you're interested in the Technical Manager's specialty contact George Kleeman for more details.

EQUIPMENT CORNER

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f you have any information on equipment that you have purchased or built to help with your weight and measure activities, please pass along the information. One of our goals is to disseminate that kind of information.

UPDATED W&M

HANDBOOK FOR 2005

A

n updated version of W&M Handbook (29 pg.) with all the changes for 2005 will be available later in February on the [usatfofficials.com](http://www.usatfofficials.com) website.