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+The Equipment and Facilities Specifications Newsletter

An official copyrighted publication of the Equipment and Facilities Specifications Subcommittee of the National Officials Committee in its 31st year of publication

WELCOME TO NEW SUBSCRIBERS

This Newsletter is a semi-annual educational tool for Implement Inspectors, Technical Managers, interested Throws Officials, and certification chairs. Input and suggestions are always welcome. This copy is being sent to about **900** officials around the world. We welcome our new subscribers with this issue:

Last Name	First Name	Association
Adams	Racquel	Missouri Valley
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Broek	Curtis	Iowa
Coley	Chad	Montana
Cotton	Jamie	Inland Northwest
Covington	Robert	Arizona
Fabrikant	Bruce	New Jersey
Fuller	Duke	Southern California
Jolivette	Alishia	Gulf
Lloyd	Molly	Nebraska
Matos	Ron	North Carolina
Nickels	Dave	Wisconsin
Padgaonkar	Ajay	Pacific
Pollock	Maureen	Oregon
Rouse	Patricia	Kentucky
Smith	Brent	Tennessee
Snead	Monica	Florida
Starkey	Douglas	North Carolina
Trego	Michael	Indiana
Westerfield	Gary	Long Island
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Wills	Nickie	Virginia

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 US mail, I don't have your current e-mail address.

CHAIRMAN'S CORNER

This will be my last column as chair of this committee. It will also be Ivars' last newsletter as editor. On March 1, I will retire as chair and Richard Messenger will take over. I would like to thank Ivars for his work on putting together the newsletter twice each year. His work schedule has increased greatly over the time he has been doing the newsletter and he is lucky to find the time to work track meets. If my count is correct, we have done 25 newsletters over that time.

I was looking back over my newsletter columns and see that my first one was February 2009. I took over from George Kleeman who started the committee. I'm sure Richard will do a fine job with the committee and I am leaving this in fine hands.

I told Richard that I would continue to put together reports on implements each year. That will be harder now that two stalwart contributors are retiring. That would be Eric Gilchrist and Charlie Day. I will miss getting their reports. Getting enough reports is important for this report. With a small number of reports, the final result is not significant. For example, this year I only had 11 reports from indoor meets. That was not enough for me to feel comfortable with the averages I computed and so I did not publish a final report. I would encourage all implement inspectors to send me a report after each meet. For each implement, I would like to know, how many were checked in, how many were disqualified, how many were repaired and put back into use and the reason for the DQ. Pictures are always appreciated and those may be shared with Richard for use in the newsletter. This report is important as it allows us to find problems with particular implements. Those problems can then be shared with implement inspectors and the distributors.

Normally, at USATF Annual Meetings, lists are kept of officials who would like to be on the various committees. With the virtual meeting this time around, that wasn't done. The members of the committee this last Olympiad were Cindy Slayton, Tony Wayne, Richard Messenger, Jon

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Turner, Charlie Day, David Katz, George Leaf and Gloria Louis. Other members were representing other committees and those committees control who is appointed. Richard will not be listed as a member since he will be the chair. Charlie Day is retiring and so will not be on the committee. As chair, Richard will have the last say on members. If anyone would like to be on the committee for the next Olympiad, please let Richard know. The number of members is set under the NOC bylaws.

I would like to thank all those who served on the committee during my tenure as chair. I especially would like to thank Ivars Ikstrums for his work on the newsletter. He has done an outstanding job. Thanks, Ivars.

RULE CHANGES AFFECTING EQUIPMENT OR FACILITIES

The following **USATF** rules change proposals, as regards equipment & facilities specifications, were dispositioned during the annual meeting:

Item 2, Rule 184 (formerly Item 46, tabled from last year): This is a general edit of the LJ/TJ take-off area. Use of Plasticine is altered and the use of video technology is recommended. ***Accepted***

Item 7, Rule 143.3(e): The sole thickness of shoes is edited to conform to the new World Athletics rule. ***Accepted as amended***

Item 8, Rule 148.4: Clarifies the required traceability of calibration weights. *Editor's Note: The rationale makes reference to the accreditation standard ISO/IEC 17025:2005. That has now been revised and replaced by ISO/IEC 17025:2017.* ***Rejected***

Item 27, Rule 181.14(b): Defines the zero line drawn on the ground for PV to be consistent with that of HJ. ***Rejected***

Item 28, Rule 181.14(b): Revises the need of a PV zero line on the landing pad to better align with current practice and reality. ***Rejected***

Item 29, Rule 181.18: Adjusts the level of the PV plant box to reduce the chance of injury. ***Rejected***

Item 30, Rule, 181.18: A redesigned PV take-off box is introduced as an alternative for safety reasons. ***Rejected***

Item 31, Rule 181.19: The design of the PV landing area near the take-off box is altered to conform with WA rules. ***Accepted***

Item 37, Rule 187.13: Eliminates the conflict of how many implements an athlete can present for inspection. ***Accepted***

Item 38, Rule 188.4: Changes the maximum diameters of Masters shots to conform to WMA rules. ***Accepted***

Item 58, Rule 302.5(g): Exempts all Youth implements from the loss-of-identity rule. ***Accepted***

Item 60, Rule 302.5(k): Eliminates the reference to an older ASTM specification for the PV box collar pad. ***Accepted***

The complete rules package is located in the annual meeting's library at:

https://www.flipsnack.com/USATF/2020-rules-proposals/full-view.html

The 2021 USATF rule book is available at: https://www.usatf.org/governance/rule-books

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The currently-available NFHS T&F publications are available at:

http://www.nfhs.com/c-235-track-fieldcross-country.aspx

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The NCAA 2021-2022 rules changes are detailed at:

https://ncaaorg.s3.amazonaws.com/championships/sports/crosstrack/rules/2021-22PRXTF_RulesChanges.pdf

The NCAA 2021-2022 rule book can be purchased and/or downloaded at:

http://www.ncaapublications.com/c-60-track-field.aspx

EQUIPMENT CORNER

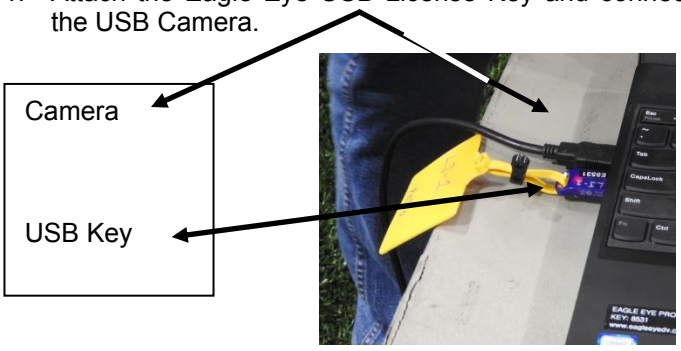
If you have any information on equipment that you have purchased or built to help with your weight and measures or technical managers' activities, please pass along the information. One of our goals is to disseminate this type of information.

Eagle Eye Horizontal Jumps Toe Board Camera
By: Geof Newing
Master Certified Official
Pacific Northwest Track & Field officials

We have been using the Eagle Eye Horizontal Review Camera for several years. The toe board official and the camera operator work together. All close jumps are reviewed by the official. We have found this to be a very effective tool that takes the guesswork out of close calls. Since we started using the camera, we have not had any protests concerning toe board fouls.

I'm going to review the setup we use in the Pacific Northwest Track and Field Officials. Once the setup is complete I can train an operator in a couple of minutes.

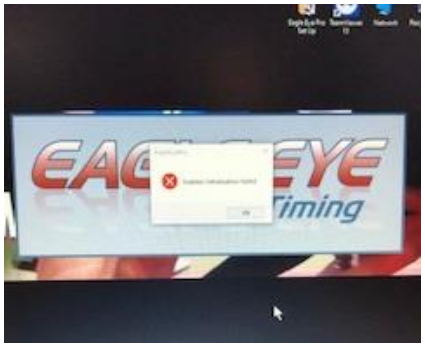
1. Attach the Eagle Eye USB License Key and connect the USB Camera.



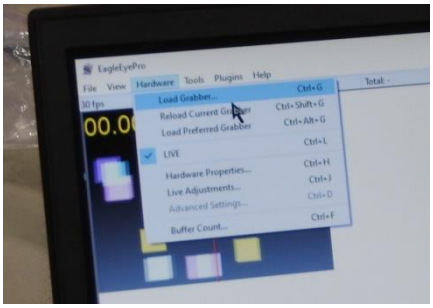
2. Set camera and tripod next to the takeoff board.

3. Turn the computer on and open the EagleEyePro software.

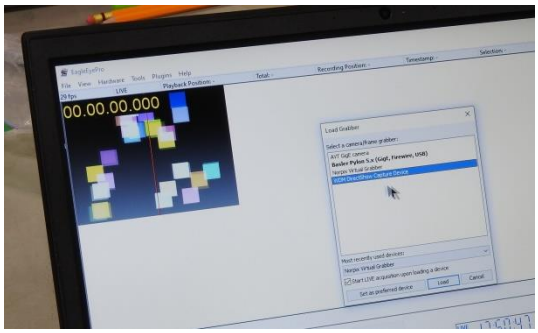
4. This message appears: Grabber Initialization Failed.
   a. Click the OK Button.



5. Open Hardware and click Load Grabber.

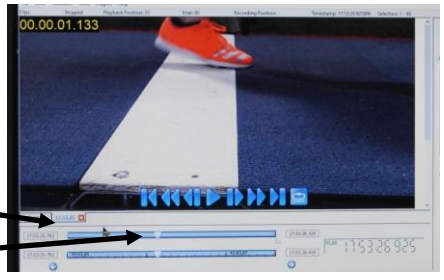


6. A window will open. Select: WDM DirectShow Capture Device



7. Re-position the camera on the takeoff Board.

8. To take a picture: As the athlete approaches about 4 to 5 yards from the takeoff board PRESS F5. This will start the camera recording. When the athlete passes the takeoff board PRESS F5 to stop the recording. Use the slider bar to locate the foot making contact with the takeoff board.



9. Repeat this process for each athlete's attempts.

10. Jumps are recorded and saved on this bar. We like to record on a field event sheet close jumps so the official and or the meet referee can view in case of a protest at a later time. We record the jump number for easy jump identification.
11. We purchased an extention USB cable so we can sit away from the takeoff board. That just keeps the area clean and less cluttered.

What About the Facilities We Use?

By Cindy Slayton

When looking for facilities for track meets, whether the meets are high school championship meets, college meets, or USATF Track and Field Championships, there are specific guidelines or requirements needed for each of these levels. Who decides what is best for the facilities when built? Is there an archive of all tracks built and stadiums with tracks built for anyone interested in building a track for reference? Are there construction companies that do nothing but build track and field facilities for high schools, colleges/universities, and major stadiums? Maybe these architect plans are all housed somewhere in the Library of Congress or maybe they are housed in one of the many GOOGLE informational facilities? As far as I know, David Katz is our archive and informational center for information about courses, venues and facilities.

First, when looking for facilities to hold different events, USATF has guidelines and Site Visit Committees to determine which sites are suitable for national events. Associations do the same for state and region championships. When looking for sites for Olympics or World Championships, there is also criteria the hosts have to build or provide. In actuality, how many facilities are built with the idea in mind for hosting future track and field events, whether state, regional, or national championships? When building a facility how many think about what is best for the football field and oh by the way, let's include a track around the football field for track meets? Many times the track will be beautiful and there will be a lot seating space provided because they want to make sure there is enough seating for the football games, and there may even be a large parking lot. When doing research for this article, I found that many situations in other associations were similar to situations we face in Georgia. Some problems may stem from finances, weather, locations, popularity of track and field, and even who may be in charge making the decisions can come into play.

Some of the examples even included tracks having been renovated and named National Historical landmarks. Surely everything needed would be included for a historical landmark. One track was advertised as "the place that fitted all your track and field needs". The renovations again were great for the football field, the tracks had great surfaces and looked great from a running standpoint, but what about the field events? One had one long runway with a pit on each end for long and triple jump. The runway was long enough for a high school meet, but what about triple jump competition for a college meet or for competing in an USATF/state Open Championship? The triple jumper would have to start his run from somewhere in the other pit. One venue had 3 shot put rings, impressive. (The rings were too close to use at the same time. The sector lines overlapped, but great for practice.)

Examples of track in general: 1) There was one venue that had a discus ring that was used for discus and hammer. (Inserts had to be used for the hammer, but the area in the sectors was slightly downhill.

2) In one venue javelin was an afterthought as an event. To have enough area for the runway (grass and uphill) and the sectors, the sectors had to be laid out with portable sector lines because they crossed on to the track and into the infield. 3) The Pole Vault in one venue was an accident waiting to happen. It was balanced so tightly in the curve that the only way to have a true pole vault competition beyond high school was to drag everything out onto the track for competition. 4) Another interesting example, a family had passed on land in their will be used as a "throws facility" for the local stadium because there was a long line of family members that excelled in the throws. It was an outstanding idea, but the facilities were about 3 miles through downtown traffic from the track.

Second, some associations had chosen to invest in high schools or college facilities donating money to add things like steeplechase, multiple high jump pits, hammer venues, etc. In theory this seems like a win-win situation for everyone included, unless the up keep of the venues were neglected and not cared for or used properly. The hammer venue looked great from a distance, but with closer inspection the gates no longer would open or close and the right gate was stuck permanently closed. Also, be careful when signing a contract to seal the deal. Be careful to have in the contract the permission to use the facilities that an association helped upgrade or renovate. Make sure the contract will be honored even if the principal or superintendent you negotiated the contract with is no longer there and the replacements care nothing about track.

hammer cage with the non-functioning doors

Third, a facility with an amazing track and all of the field venues working properly and are sufficient for different levels of competition can be a beautiful site to see. Now let's talk about the equipment part. For example, what happens when something goes wrong or breaks on the pole vault standards in the middle of competition? Good question, not many schools have extra standards for pole vault stored in an equipment room. Some examples given are: 1) GA Tech was having an Invitational track meet and one of the pegs on one of the standards used to help with the raising and lowering of the bar broke in the middle of competition. I was lucky enough to be working this event or I might not have believed it. When it happened all the athletes started packing up their poles. I asked one of them "What are you doing?" One guy explained that the same thing had happened at another track meet and the event was shut down for the entire meet. Well, at the GA Tech track meet within 20 minutes the grounds crew had fixed the standard and was ready to go again. The big difference was everyone on the grounds crew was an engineer. Repairing a pole vault standard was all in a day's work for them. 2) What about the college that is built in the city and has so many buildings around it that a wind tunnel forms at different times? This college has 2 sets of pole vault standards and pits back-to-back set up to accommodate the direction of the wind. If one side breaks, you have an alternative, move to the other side of the pole vault venue. 3) A brand new set of pole vault standards, mats, etc., was delivered to a venue for an Indoor invitational meet. The standards were huge brand new towers. The only problem was one of the standards/towers had been damaged in shipment. The pole vault event was still competed, but with the standards of a nearby small college loaded upon the back of a pickup truck. So obviously, not only the facility can make a difference, but also the equipment for the different venues, and also maybe who is on the grounds crew can make or break the competition like in pole vault competition.

Other examples: 1) I received one that involved an on-site visit. Some debris was piled on one of the shot put rings during the tour. The comment given was it will all be cleared off in time for the meet. It was, but clearing the debris later showed that one side of the toe board was cracked. By the middle of the first age group competition, pieces were breaking off.

shot circle with the junk piled up in it

2) The steeplechase water pit had not been properly cared for and the plug for the water was stuck and the water drained all the time. So before competition, the water had to be filled to the top right before competition because the water drained just like you were draining your tub at home. 3) The facilities and venues had been neglected during the pandemic and the grass was allowed to grow and was not cut regularly. This can be a simple problem to solve unless fire ants have taken up residences in the absence of use and regular trimmings. 4) Georgia Association has hammer and steeplechase during their state JO championship, but have those competitions at a different venue during the track meet. 5) Finally, an association had invested in steeplechase barriers for a high school and also helped put in a water pit for steeplechase. This was done so the association could host a state or region JO championship using their venue. The barriers were later found stacked against a wall with all the hurdles piled on top of them and anything else that would fit. Needless to say, the barriers had to be lifted to be moved, and one or more of the wheels were damaged or broken on every barrier.

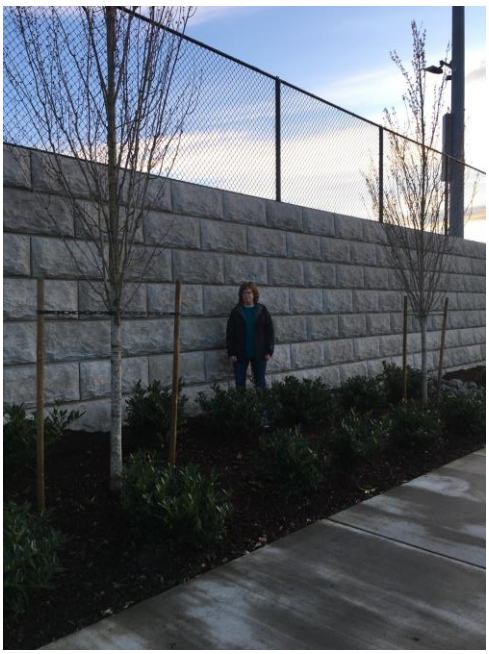
What about the stadiums that are built just for track and field in mind like the Olympics? Surely nothing is going wrong there. I had the rare opportunity to tour the stadium while under construction for the 1996 Olympics in Atlanta. I was thrilled to say the least. During the tour I saw the long/triple jump pits. They were beautiful. The engineer told me in great detail how they had to tear out the long/triple jump pits and rebuild them. The reason was during construction it had rained a lot. They found out that every time it rained the long/triple jump pits would flood.

The drainage system was not sufficient for the rain and the pits flooded every time it rained. What if that had happened at the Olympics? For once, thank goodness for a lot of rain during construction.

One last interesting entry has been provided by Scott Phoenix, as passed on by Duke Fuller:

A brand new high school in the Portland, OR metro area - cost of the facility, somewhere around $185,000,000. Shot sector immediately adjacent to what at the time the school opened was a 5' tall fence. Look at the bottom of the fence panels in this shot. You can make out a sidewalk that is around 15' below the fence height. The ground leading up to the fenced area is steep and bears planting and that sidewalk runs along that. An errant shot launched over the fence could easily smack into a soft and fleshy body below, causing death or serious injury.

Shot put venue next to low fence, next to retaining wall



Below the shot put venue

Look at the run-out area for one of two horizontal jumps pits at the same facility:

For the record, as soon as I saw the facility in Oct. 2017, I wrote the school AD, the principal, the superintendent, the school board, and the director of the OSAA, Oregon State Athletic Association to tell them that they were staring at an immense law suit. I also told the high school officials assignor through Reftown not to allow any USATF officials to work there until the problem was fixed. Don't have any idea who else wrote, but my conscience is clear on the matter.

Here is how the situation was fixed. [At least this is how they fixed it] Pretty nifty, eh?

Shot put cage

In closing, the list could go on of so many examples, incidences and stories. I guess my point is, though track and field venues are important to us and we want to have adequate venues for the field and running events, it is not always going to happen. Associations are finding it harder and harder to find facilities to host events, whether it be for state, region and national championships. We also know that even facilities built for an Olympics can have its

own set of problems. What can we do? Can we encourage school systems and colleges to take into consideration when building or renovating tracks to please take the time to add adequate venues for field events too? Not all high schools can be as lucky as a high school that had an All American in high jump as a past student and coach. As a result, the high school has 3 very nice high jump pits that have their own metal covers. The pits can also be easily moved from place to place. Also, not all colleges can be so lucky as to have Edwin Moses as a student/athlete and later have a track built in his honor. (Little known fact, when Edwin Moses attended Morehouse College, he did not have a track to practice. No wonder he had to be so innovative in his methods, training, and practice.) Should we as associations continue to partner with school systems and colleges and help them with their facilities hoping to use the facilities in return? There is no one answer I am afraid. We can hope that when facilities are built that someone with a track and field background is at least consulted. I am sure that David Katz has many more stories or examples than in this article. I am sure that many more officials besides Duke Fuller can relate to this article.

Wouldn't it be wonderful if in every state facility/stadiums were built with track and field as the major function and football was an afterthought?

(Note: Thank you to everyone that contributed examples and photos for this article. Thank you, Duke Fuller and Scott Phoenix for the great example with photos included. Thank you to Bob Springer and Ivars Ikstrums for all your years of dedication to the sport, weight and measures, and your dedication to this E & F Newsletter for so many years. Thank you, David Katz for continuing to be the "voice of reason" and the "Guru" in all you do, and for your years of dedication to USATF and the World to make the courses, venues, and facilities better, safer, and fairer courses and venues in the world of track and field.)

Editor's notes:

The above article included a description and pictures of potentially hazardous shot put and long jump venues at a HS facility. An aerial image of the long jump venue was located on-line and shown here:

Clearly, the pit butts up against the fence line. This sort of problem could've been prevented by a review of the facility requirements before an architect was placed on contract, and a review of the master drawings before construction started.

The same facility has a second LJ venue which is crammed against the fence line, together with the PV venue (see picture at left). While this LJ venue has some room for run-throughs, it is far from optimal. Also, one has to wonder how the PV competitors will be shuffled to their runway and not conflict with the other runway.

Anyone who is aware of a new T&F facility that is being planned, or an existing facility that will be remodeled, should read the above article again and inject themselves (or volunteer someone else) into the planning process. It is unfortunate that in many cases, the host school's AD, contracts manager and finance folks will take over the planning and sublet the design without involving the coaches or a subject matter expert, such as an official with technical management experience. I know of a local case where a DIII school was about to break ground on a new T&F facility when the head coach accidentally came across the master drawings. It was noticed that the design was missing the steeplechase water jump. Also, the field event layout was suboptimal. These sort of mistakes can be avoided if the right people get involved early on.

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.

An implement introspective

Unless you constantly monitor the evolution of the Rules, it is easy to miss out on developments in all areas of T&F.

The purpose of this column is to provide a top-level overview of implement evolution during the last 10+ years in case someone "didn't get the memo" concerning a particular rules change. Also, this may be an interesting lesson for new implement inspectors in that our Rules are not always constant.

The shot

It was more than 10 years ago when the 2 kg shot was introduced. It was adopted by the WMA and USATF for Masters competition in the W75+ groups. Not long after, the IPC replaced the 4 lb shot with the 2 kg, and USATF Youth established a new age category (8 & Under) which also competes with the 2 kg.

Masters shot max diameters have been adjusted.

The discus

At the same time when WMA established the 2 kg shot, it also created a 750 gram discus for W75+, with USATF Masters following suite. Initially, the 750 g had its own unique dimensions, being smaller in size than a 1 kg discus. But subsequent rules changes created a hybrid 750 g that allows the dimensions to vary from the original all the way to the size of the 1 kg. This change stemmed from technical merit, but it creates an interesting situation for the Inspector: All 1 kg discuses must be weighed to ensure that a 750 g discus does not sneak in. Assume nothing; check them all.

The 1.5 kg discus minimum and maximum body thickness spec was adjusted.

The javelin

A new javelin was introduced for Youth group 11-12 for both boys and girls. This is the 450 g Aero Jav which bridges the jump from the Mini Jav to 600 g. It has its own unique specifications.

The hammer

The 2 kg hammer was introduced by the WMA and adopted by USATF Masters for W75+. It underwent a subsequent change wherein the allowable diameter of the head was expanded.

The minimum lengths of all hammers were eliminated so that only a maximum length specification exists today.

The handle no longer has dimension specs. Only the length of the entire hammer is specified.

The 5 kg hammer maximum head diameter was adjusted.

The wire loop size requirement was eliminated.

The weight

The 4 kg weight was introduced by the WMA and adopted by USATF Masters for W75+.

The maximum length of the weight was increased from 40.64 cm to 41.00 cm.

The handle underwent a series of changes. Today there are two definitions of the handle, one for outdoor use and the other for indoor use.

The ultraweight

The dimensions of the ultraweight were greatly refined. Additionally, it is now permissible to stack multiple plates to achieve the dimension and weight requirements.

DOCUMENT LINKS

The **Implement Inspector's Handbook** is available at: https://pacificnorthwest.usatf.org/information-for/officials/officials-resources

Note: A revision is forthcoming in the near future.

Previous EFSS newsletters are located at:

https://www.usatf.org/programs/officials/officials-newsletters