



NCWM - NEWS

National Conference on Weights and Measures

INSIDE THIS ISSUE

Chairman's Column.....	1
NTEP Column: Use of Non-NTEP Approved Load Cells	4
New Slate of Officers Nominated.....	5
NCWM Welcomes New Members	8
OSHA's Powered Industrial Truck Standard	10
PD Committee Interim Report	11
L&R Committee Interim Report...	12
S&T Committee Interim Report ...	13
Valuable Training Comes to the Micronesia Area	14
Event Calendar	16

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Chairman's Column

Kristin Macey, NCWM Chair — California Division of Measurement Standards



Dear NCWM Members,

My theme for this year is "Tradition and Technology: Finding the Right Balance." While there is lots to talk about on that subject, I feel compelled to use this column as an opportunity to thank all the volunteers who make NCWM successful.

Before attending our conferences, I peruse the NCWM membership rolls several times. I always make sure to look at names and affiliations. The diversity of our members and the entities they represent is remarkable. These individuals attend to represent their companies or government organizations. Their businesses and agencies have a vested interest in creating the best measurement standards that will allow for innovation, be fair and equitable, and be ultimately intended for enforcement by state and local weights and measurement officials.

If you are reading this column, you are probably a NCWM member; if not, maybe you would like to join. I'd like to take a moment to thank those of you who volunteer your time and expertise to the U.S. standards setting process, which is complex and admittedly never finished. It involves policy makers, design engineers, test developers, and measurement specialists to ensure that standards and test results are meaningful and defensible. NIST Handbook 44 provides for a "tentative" status to new devices which allows enforcement officials and

others the opportunity to study and test the new technology, and provide feedback to the appropriate work group and the members of the Specifications and Tolerances Committee before the code goes for final NCWM adoption.

For example, NIST Handbook 44 currently has three tentative codes: Section 3.39. Hydrogen Gas-Measuring Devices (Added in 2010), Section 2.25. Weigh-In-Motion Systems Used for Vehicle Enforcement Screening (Added in 2015), and Section 3.40. Electric Vehicle Fueling Systems (Added in 2015). If you are in a position to try out one of these new codes, please volunteer your expertise and don't forget to comment on your experience. These are your standards! Additionally, in July 2017, NCWM regulators are scheduled to vote on a new tentative code for Transportation Network Measurement Systems.

The work of the recently established NCWM Charter Team continues to explore ways to create efficiencies in our standards setting process. Currently, new proposals are reviewed by regional weights and measures associations only in the fall, and national voting takes place only once a year at the NCWM meeting in July. One concept the team is exploring is allowing new proposals throughout the year and creating opportunities for in-person voting twice per year. Rest assured though that NCWM is approaching any changes in a calculated and measured approach (pun intended!) and any modifications to our current procedures will be ongoing.

One improvement that we've talked about in the past is about to come to fruition. The Professional Development

Continued on page 2

Committee is about to release its basic competency exams, intended for service personnel working on commercial weighing and measuring devices, and fledgling inspectors proficient only in the most commonly found device types. These exams were developed by Ross Andersen (NY, retired) and a crew of volunteer subject-matter experts who nitpicked every word in every question to ensure clarity and correctness. When NCWM has developed a method for proctoring the exams, they'll be released for use, hopefully this summer.

Safety is an important aspect for persons working in laboratories, in field positions, and even in desk jobs. The NCWM Safety Task Group was formed last month and has already put together a team charter. If you want to volunteer to be part of this effort, please contact myself or Julie Quinn (MN).

One NCWM member took volunteerism to an extreme last November. Brett Gurney (UT) traveled half way around the world to spend a week with seven representatives of the Commonwealth of the Northern Mariana Islands (Saipan, Tinian, Rota, Guam, Palau, Chuuk, and the Marshall Islands) and Guam to provide package testing skills to 25 students eager to learn the basics. His travel was paid for by the Associate Membership Committee, whose members contribute additional annual fees to establish a training fund

for the purpose of providing training to larger groups of people. Thanks to the Associate Membership Committee, and watch for a separate article from Brett describing the challenges and rewards of his trip. It brings home the fact that we take for granted things like a NIST-traceable metrology lab to certify standards and readily accessible testing equipment and facilities.

This February, Dr. Doug Olson takes over as the new chief of the NIST Office of Weights and Measures. Join me in welcoming him to this important position for U.S. weights and measures. Thanks also to Georgia Harris as interim chief, for keeping things on track during the interim period after Carol Hockert retired.

It is fitting that we'll be in Pittsburgh, PA for our annual meeting this July where driverless cars are being tested and changes to the taximeter code and a new transportation network measurement systems code are voting items. If you're daring, maybe you want to take a ride in one of the driverless cars available in the city known as the "City of Bridges." Pittsburgh has 445 bridges, more than Venice, Italy!

Looking forward to seeing each of you in Pittsburgh this July!

Kristing Maury

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NTEP Column: “Why does NTEP allow the use of non-NTEP load cells for some scales?”

By Jim TrueX, NTEP Administrator

This article was published about two years ago, but we have answered many recent inquiries from the weights and measures community confused about the use the term “non-NTEP” on some NTEP certificates. It appears to be especially confusing when some of the scale models use load cells traceable to NTEP certificate but others, on the same certificate, use non-NTEP certified cells that must be identified on the certificate because of the load cell substitution requirements specified in *NCWM Publication 14, Technical Policy*. All the scale models listed on an NTEP certificate are covered by the certificate or they would not be listed on the certificate. The “non-NTEP” designation applies to the load cells used in that particular model, version, capacity, etc.

When reading an NTEP Certificate of Conformance (CC) we see the load cell used in a scale is identified as non-NTEP in some case. Many have inquired as to why NTEP allows the use of load cells that are not traceable to their own NTEP CC or “non-NTEP” cells.

While *NIST Handbook 44* does not specifically state that non-NTEP load cells are permitted for use in weighing instruments; *Handbook 44* does contain several hints that not all load cells used in commercial scales are required to have an NTEP certificate. For example:

- If we look at *NIST Handbook 44, Scales Code, Marking Requirements, Table S.6.3.a.*, the heading of the fourth column reads “Load Cell with CC (11).” This column heading implies that if these marking requirements are for load cells with a Certificate of Conformance, there must be load cells without a Certificate of Conformance or non-NTEP load cells.

- Also in the Scales Code, paragraph S.6.3., reads in part: “Scales, main elements of scales when not contained in a single enclosure for the entire scale, load cells for which Certificates of Conformance (CC) have been issued under the National Type Evaluation Program (NTEP, and other equipment necessary to a weighing system...”. The statement “..., load cells for which Certificates of Conformance (CC) have been issued...” also implying there must be load cells without a Certificate of Conformance or non-NTEP load cells.

- Additionally, if we look at Scales Code paragraph S.5.4. we find the following stated: “This requirement does not apply to complete weighing/load-receiving elements or scales, which satisfy all the following criteria:”

- the complete weighing/load-receiving element or scale has been evaluated for compliance with T.N.8.1.

Temperature under NTEP (meaning the complete weighing device, including load cell(s) has been tested in an environmental chamber);

- the complete weighing/load-receiving element or scale has received an NTEP Certificate of Conformance;”

Again, no clear statement, but the fact that the formula shown in S.5.4. does not apply if the specified conditions are met tells us that the use of load cells without a Certificate of Conformance or non-NTEP load cells is acceptable when the complete weighing/load-receiving element or complete scale has undergone and satisfied influence factor testing.

So, *NIST Handbook 44* tells us that not all load cells have their NTEP certificate but does not tell us why. However, it does tell us that the complete scale (containing the load cell) or weighing element (containing the load cell) must be evaluated for compliance with T.N.8.

To understand more we must go to *NCWM Publication 14, Weighing Devices, NTEP Technical Policy, Section B.1.*, which contains the following statement:

“The main elements and components (indicating elements and load cells) of scales with a capacity greater than 2000 lb. must be tested separately for compliance with the influence factor requirements.”

[Note: If we read further we will find some exceptions but most of those would result in a provisional NTEP certificate not a full NTEP certificate.]

Is there any penalty for using non-NTEP cells? Yes, in fact there is a potential penalty for the certificate holder. *NCWM Publication 14, Technical Policy* allows for the “Substitution of Load Cells in Scales” using a set of specific requirements to determine if the cells are metrologically equivalent. The first requirement in evaluating metrologically equivalent is that both load cells must have been evaluated separately and have a separate load cell Certificate of Conformance. Obviously, since a non-NTEP load cell was used in the cases we are addressing, it does not have an NTEP certificate and cannot be substituted. In these cases, the certificate holder must resubmit the device to NTEP for full performance testing to allow the use of another load cell. Reason being that NTEP does not have values for non-NTEP load cells, such as n_{\max} or v_{\min} to determine equivalency.

Continued on page 5

NTEP Column (cont.)

Now, we can use this information to piece together the facts pertaining to the use of non-NTEP cells used in complete scales and weighing/load-receiving elements.

- 1) *NIST Handbook 44* recognizes the use of load cells that do not have their own NTEP Certificate of Conformance.
- 2) *NCWM Publication 14* recognizes the use of non-NTEP load cells in scales 2000 lb. capacity and less.
- 3) The scale or weighing element containing a non-NTEP load cell or load cells must be tested by NTEP for compliance to influence factor (T.N.8) requirements.
- 4) If a non-NTEP load cell is used it is identified on the NTEP certificate and the load cell cannot be substituted, otherwise the device must be resubmitted to NTEP for a complete performance test using the different cell. When this scenario happens, an amended certificate identifying the non-NTEP cells used during the evaluations will be issued.

Hopefully this article has helped eliminate some of the confusion and answer questions that may have been on your mind. If you have additional questions or would like to discuss the content of this article, contact Jim Truex at jim.truex@ncwm.net.

New Slate of Officers Nominated

The NCWM Nominating Committee chaired by Jerry Buendel (Washington) met at the 2017 Interim Meeting in San Antonio, Texas to select a slate of candidates for officers of NCWM. The Nominating Committee gives careful consideration to professional experience, individual qualifications, conference attendance and participation, and other factors of importance in selecting officers who will lead this organization into the future. Those who are elected will selflessly give of their time and talents for the betterment of the NCWM mission.

The following slate will be presented for election at the 102nd NCWM Annual Meeting this July in Pittsburgh, Pennsylvania:

CHAIRMAN-ELECT

Brett Gurney, Utah

BOARD OF DIRECTORS ACTIVE MEMBERSHIP - WESTERN

Mahesh Albuquerque, Colorado

TREASURER

Raymond Johnson, New Mexico

Employment Opportunities

NCWM is proud to serve the weights and measures community, both private and public sectors, by listing employment opportunities in related fields. Any organization that maintains memberships with NCWM may request positions be posted online for public viewing at www.ncwm.net/resource/employment-opportunities.

If you wish to post employment opportunity information, please send inquiries to don.onwiler@ncwm.net.

'16 - '17 NCWM Board of Directors

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California Division of Measurement Standards

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TREASURER

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Danielle Monts

American Wood Fibers
Stephen Faehner

Appheaven, Inc.
Jatin Patel

**Archer Daniels Midland
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Michelle Cooper
Tony Winsor

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B & I Scales
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Tim Scott

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Samuel Wimsett

Cargo Care Services Corp.
Juan Ramirez

Carlton Scale
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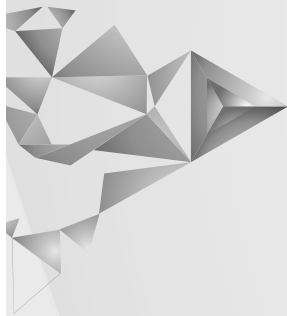
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OSHA's Powered Industrial Track Standard By Julie Quinn, Minnesota

When most of us think of powered industrial trucks and OSHA, we think of forklifts. The forklift association is so strong in fact that OSHA's Powered Industrial Truck Standard (29 CFR 1910.178) is often called OSHA's 'forklift standard'. If your agency owns and operates powered pallet jacks and weight carts however, you should be aware that these are also subject to the same training requirements as forklifts and other industrial trucks covered by the standard. Training must cover all of the topics mentioned below.

Types of Powered Trucks

The standard lists 7 types of common industrial truck based on design, power source, wheel-type, and function:

- **Class I** - electric motor rider trucks
- **Class II** - electric motor narrow aisle trucks
- **Class III** - electric motor hand trucks or hand/rider trucks [includes pallet jacks and many weight carts]
- **Class IV** - internal combustion engine trucks (solid/cushion tires)
- **Class V** - internal combustion engine trucks (pneumatic tires)
- **Class VI** - electric and internal combustion tractors
- **Class VII** - rough terrain forklift trucks

Employees must be trained on each type of powered truck they are expected to use before they are allowed to operate them.

Power Sources

OSHA distinguishes between power sources when classifying industrial trucks because different power sources create different risks. Fueled by gas, diesel, LPG or CNG, internal combustion engines, these machines present risks associated with handling combustible liquids and gases, as well as exposure to noise and exhaust pollution, especially when used indoors. Electric motors create hazards associated with battery recharging including fire, explosion, hydrogen gas, and sulfuric acid splash.

Employees must be trained on how to safely refuel the trucks they operate and how to respond to spills, fires, chemical exposures, and other hazards associated with their trucks' power sources.

Operations

Employees need both classroom and hands-on training in:

- Pre-operation inspection and maintenance
- Good operating practices to prevent accidents
- Hazards and recommended practices for each step of handling the load, including the composition of the load itself

Some areas of particular concern are safely placing the load on the truck, balancing the load, handling loads on inclined slopes, and operating in or near a loading dock area.

Workplace Conditions

As an employer, you must address the physical hazards in any area where powered industrial trucks are used. Employees must be trained on how your agency addresses those hazards. If they are working in field locations which are not under your agency's direct control, they must also know how to assess and address hazards themselves, including:

- Physical conditions such as obstructions, floor loading limits, clearance, etc.
- Pedestrian traffic patterns
- Ramps and grades
- Loading docks
- Narrow aisles
- Elevators
- Enclosed areas and any type of hazardous areas where truck usage is not allowed

Training Requirements

Employees must receive both formal training (lecture, video, on-line class etc.) and practical training which includes both a demonstration on the actual equipment and hands-on exercises. As an employer, you must evaluate and certify each operator's competence before allowing the operator to operate the equipment without direct supervision. You must also certify the operator's continued competence every three years. If an employee, who is operating a powered industrial truck injures a person or causes physical damage to any property including the truck itself, the employee must receive refresher training before being allowed to operate the truck again. Refresher training is also required if an employee shows any deficiency in safe operation of the truck during normal operations or during the three-year evaluation. Refresher training must include all components of the original training: formal training, demonstrations, and hands-on exercises.

Continued on page 11

OSHA's Powered Industrial Track Standard By Julie Quinn, Minnesota

Resources

A quick internet search reveals that many companies offer on-line, video, and classroom training on forklifts. Fewer resources are available on powered pallet jacks. Unsurprisingly, no one seems to be offering training materials specifically geared to scale test weight carts. Fortunately, employers are allowed to develop their own training material as long as it meets the requirements of the standard. OSHA provides information on developing training on their website at www.osha.gov/SLTC/etools/pit/assistance/index.html

Other resources may be found through the National Safety Council at www.nsc.org, or by contracting the Association of General Contractors chapter in your area at www.agc.org.

Professional Development Committee Interim Report

By Stacy Carlsen, PD Committee Chair, Marin County, California

The 2017 Professional Development Committee Interim Agenda consisted of 5 informational items. A summary of comments received by the PDC during open hearings and committee direction going forward follow:

4100-1 Professional Certification Program

Two basic competency exams have been developed and will be implemented once a proctoring system has been established. The committee has also created a post-exam survey for the professional certification exams which will be implemented soon. An exam for precision scales has been moved up in priority due to expanding markets for cannabis.

4100-2 Training

NIST provided an overview of upcoming training events which will be posted on NIST's website under NIST OWM's calendar of events. NIST will be hosting two Weights and Measures Administrators' Workshops on March 27-31 and April 10-14. The workshops will be structured to benefit new and experienced administrators. The agenda will include industry panels and presentations of best practices from current administrators. There has been a request for NIST to develop training on precision scales due to expanding markets for cannabis.

4100-3 Instructor Improvement

The committee received a report from NIST OWM on efforts to revise criteria for instructors. OWM is reassessing the background and experience of instructors and will ask them to "self-declare" the areas of technical expertise. They are addressing their administrative procedures related to training and plan to hold conduct a "Trainer Boot Camp" for those trainers it is actively mentoring. A NIST grant awarded to NCWM is used to support the travel to these seminars. These instructors are providing great benefit to programs, particularly in areas of high turnover.

OWM has used a small number of vendors to present "train the trainer" courses to ensure consistent approach and terminology. OWM is assessing the possibility

of "train the trainer" courses being offered by the American Management Association. If so, they offer courses in other places in the country that may be more accessible.

OWM has worked with many people in instructor training courses and workshops, but they don't have the resources to mentor each one to provide training on behalf of NIST. These individuals may still conduct training in their own jurisdictions and other venues. OWM expressed appreciation to those directors who have allowed their staff to participate in instructor training.

The committee received a report from Brett Gurney (UT) regarding his experience providing training in Saipan to the Northern Mariana Islands of Saipan, Tinian and Rota, Guam, Palau and Chuuk and the Marshall Islands. He thanked the AMC for travel funding and the PDC for continued support of efforts such as this.

4100-4 Recommended Topics for Conference Training

The committee recommends the following topics for the annual meeting:

- Life Cycle of Petroleum from Well to Retail (API) - Prentiss Searles
- OSHA Inspections and Standards – Julie Quinn
- Marketplace Surveys – NIST/Survey Expert

4200-1 Safety Awareness

Safety Task Group

The safety liaison reported that the NCWM Board of Directors authorized the formation of a Safety Task Group which would be chaired by the safety liaison and report directly to the PDC. The group will meet at the 2017 NCWM Annual Meeting followed by monthly web meetings. It will consist of the regional safety liaisons, a representative from NIST OWM and industry representatives from weighing and measuring fields. Please contact safety liaison, Julie Quinn (julie.quinn@state.mn.us) if you are interested in participating.

Continued on page 12

Annual Safety Survey

The safety liaison also reported that the 2016 safety survey will be open at the end of February. This year it will be open to all membership. Associate and advisory members who are interested should contact NCWM Executive Director Don Onwiler at don.onwiler@ncwm.

net. The survey will not collect the identity of injured employees or employers. It will request the general nature of the responding employer and geographic region. All other information can be taken from an agency's internal records or from its OSHA 300 records. Contact Julie Quinn (julie.quinn@state.mn.us) if you have any questions before completing the survey.

Laws and Regulations Committee Interim Report

By Ethan Bogren, L&R Committee Chair, Westchester County, New York

The 2017 Laws & Regulations Committee Interim Agenda consisted of 25 items. Presentations and written testimony submitted to the committee are available on the NCWM website. The Fuels & Lubricants Subcommittee and the Packaging & Labeling Subcommittee both met at the Interim Meeting and reported to the L&R Committee. The L&R Committee designated the status for each of the agenda items as follows:

VOTING ITEMS

2302 NIST HANDBOOK 130 – UNIFORM REGULATION FOR THE METHOD OF SALE COMMODITIES

- 2302-1 1. Food Products and Section 2. Non-Food Products
- 2302-2 1.12. Ready-to-Eat Food
- 2302-5 2.13. Polyethylene Products
- 2302-6 2.17. Precious Metals
- 2302-7 2.20. Gasoline – Oxygenate Blends and 2.30. Ethanol Flex Fuel
- 2302-8 2.23. Animal Bedding
- 2302-9 2.XX Automatic Transmission Fluid

2307 NIST HANDBOOK 130 – UNIFORM ENGINE FUELS AND AUTOMOTIVE LUBRICANTS REGULATION

- 2307-1 2.14. Products for Use in Lubricating Automatic Transmission Fluids and 3.14. Automatic Transmission Fluid
- 2307-2 3. Classification and Method of Sale Fuels

2500 NCWM POLICY, INTERPRETATIONS, AND GUIDELINES

- 2500-1 2.1.1. Weight(s) and/or Measure(s). , 2.1.2. Weight(s) and/or Measure(s) 2.1.3. Definition of Net Weight. , 2.2.1. Gift Packages. , 2.2.2. Sand. , 2.2.3. Sold by 4/5 Bushel. , 2.2.5. Lot, Shipment, or Delivery. , 2.2.6. Aerosols and Similar Pressurized Containers. , 2.2.7. Aerosol Packaged Products. , 2.2.8. Variety and Combination Packages. , 2.2.9. Textile Products. , 2.2.10. Yarn. , 2.2.11. Tint Based Paint. , 2.2.12. Reference Temperature for Refrigerated Products: When a Product is Required to be Maintained under Refrigeration. , 2.3.9. Fireplace Logs. , 2.3.11. Packaged Foods or Cosmetics Sold from Vending Machines. , 2.3.12. Movie Films, Tapes, Cassettes

2600 NIST HANDBOOK 133

- 2600-1 1.2.1. Inspection Lots and Section 3.10. Mulch and Soils Labeled by Volume
- 2600-4 4.5 Polyethylene Sheeting, Bags and Liners

DEVELOPING ITEMS

2302 NIST HANDBOOK 130 – UNIFORM REGULATION FOR THE METHOD OF SALE COMMODITIES

- 2302-11 Electric Watthour

2600 NIST HANDBOOK 133

- 2600-3 Recognize the Use of Digital Density Meters

2700 OTHER ITEMS

- 2700-1 Fuels and Lubricants Subcommittee
- 2700-2 Packaging and Labeling Subcommittee

INFORMATIONAL ITEMS

2307 NIST HANDBOOK 130 – UNIFORM ENGINE FUELS AND AUTOMOTIVE LUBRICANTS REGULATION

- 2307-3 4.1. Water in Retail Engine Fuel Storage Tanks

WITHDRAWN ITEMS

2301 NIST HANDBOOK 130 – UNIFORM PACKAGING AND LABELING REGULATION

- 2301-1 10.4. Multi-unit Retail Packages

2302 NIST HANDBOOK 130 – UNIFORM REGULATION FOR THE METHOD OF SALE COMMODITIES

- 2302-3 1.12. Ready-to-Eat Food
- 2302-4 1.7.3. Bulk Ice Cream, Similar Frozen Products
- 2302-10 2.XX. Agricultural Vending

2307 NIST HANDBOOK 130 – UNIFORM ENGINE FUELS AND AUTOMOTIVE LUBRICANTS REGULATION

- 2307-4 4.3. Dispenser Filters

2600 NIST HANDBOOK 133

- 2600-2 1.2.3. Individual Package Requirement
- 2600-5 Table 2-12. Upper and Lower MAV Limits for Fish and Fishery Products Labeled with Count

2700 OTHER ITEMS

- 2700-3 NIST Handbook 158

Specifications and Tolerances Committee Interim Report

By Dr. Matthew Curran, S&T Committee Chair, Florida

The 2017 Specifications and Tolerances Committee Interim Agenda consisted of 40 items this year. Presentations and written comments provided to the Committee are available on the NCWM website. Oral comments for these agenda items was heard during the open hearing session at the Interim Meeting and all of the aforementioned were considered by the Committee when assigning the following status for each item as follows:

VOTING ITEMS

Scales Code

- 3200-1 S.1.2. Value of Scale Division Units & Appendix D – Definitions: batching scale
- 3200-2 S.1.2.2. Verification Scale Interval
- 3200-3 S.1.8.5. and S.1.9.3.

Liquid Measuring Devices Code

- 3300-1 S.2.1. Vapor Elimination
- 3300-2 UR.3.4. Printed Ticket

Vehicle-Tank Meters Code

- 3301-1 S.2.1. Vapor Elimination
- 3301-3 S.5.7. Meter Size

LPG and Anhydrous Ammonia Liquid-Measuring Devices Code

- 3302-1 N.3. Test Drafts
- 3302-3 N.4.2.3. For Wholesale Devices

Milk Meters Code

- 3305-1 S.2.1. Vapor Elimination

Water Meters Code

- 3306-1 S.2.2.1. Air Elimination

Mass Flow Meters Code

- 3307-1 S.3.3. Vapor Elimination
- 3307-2 N.3. Test Drafts

Taximeters Code

- 3504-1 A.2. Exceptions. (See related item 3600-6)
- 3504-2 USNWG on Taximeters – Taximeter Code Revisions and Global Positioning System-Based Systems for Time and Distance Measurement

Multiple Dimension Measuring Devices Code

- 3508-1 S.1.7. Minimum Measurement Lengths and S.1.8. Indications Below Minimum and Above Maximum

Other Items

- 3600-6 5.XX. Transportation Network Measurement Systems – Tentative Code and Appendix D Definitions

INFORMATIONAL ITEMS

Weigh-In-Motion Systems Used for Vehicle Enforcement Screening Code

- 3205-1 A. Application, and Sections Throughout the Code to Address Commercial and Law Enforcement Applications

DEVELOPING ITEMS

General Code

- 3100-1 G-S.5.2.2 Digital Indication and Representation

Scales Code

- 3200-4 Table 3, Parameters for Accuracy Classes
- 3200-5 Table 3, Parameters for Accuracy Classes
- 3200-6 N.1. Test Procedures
- 3200-8 T.N.3.6. Coupled-in-Motion Railroad Weighing Systems

Automatic Bulk Weighing Systems Code

- 3202-1 A. Application, S Specifications, N. Notes, UR. User Requirements

Vehicle-Tank Meters Code

- 3301-2 S.3.7. Manifold Hose Flush System

LPG and Anhydrous Ammonia Liquid-Measuring Devices Code

- 3302-2 N.4.1.2. Repeatability Tests and N.4.2.4. Repeatability Tests for Type Evaluation

Other Items

- 3600-1 Electric Watthour Meters Code under
- 3600-2 Appendix A – Fundamental Considerations: Section 4.4. General Considerations
- 3600-5 Appendix D – Definitions: Remote Configuration Capability

WITHDRAWN ITEMS

General Code

- 3100-2 G-UR.3.3. Position of Equipment
- 3200-7 T.1. General and T.N.2.1. General

Belt-Conveyor Scale Systems Code

- 3201-1 T.1. Tolerance Values

Automatic Weighing Systems Code

- 3204-1 T.N.2.1. General

Weigh-In-Motion Systems Used for Vehicle Enforcement Screening Code

- 3205-2 T.1.1. Design

Continued on page 14

Liquid Measuring Devices Code

3300-3 Recognized the Use of Digital Density Meters

Vehicle-Tank Meters Code

3301-4 N.4.X. Automatic Stop Mechanism, T.X.
Automatic Stop Mechanism and UR.2.6.

Multiple Dimension Measuring Devices Code

3508-2 T.3. Tolerance Values

Electronic Livestock, Meat, and Poultry Evaluation Systems Code

3509-1 T.1. Tolerances on Individual Measurements

Other Items

3600-3 Appendix D – Definitions: Batching System

3600-4 Appendix D – Definitions: overregistration and underregistration

Rethceif Packaging

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Sendik's Food Markets

Paul Doty

Tennessee Dept. of Ag.

William Dunn

Andrew McLeod

Daniel Truitt

Right Weigh, Inc.

Thomas Arm

South Dakota W&M

Brenda Sharkey
Jason Smith

The Lubrizol Corporation

James Bush

Waconia Manufacturing, Inc.

Paul Peterson

Rinstrum, Inc.

Joe Rickey

SR Instruments

John Phillips

Total Control Systems (a Division of Murray Equipment, Inc.)

Shawn Patterson

Walmart Corporate

Patrick Brutus

San Benito County W&M

Karen Overstreet

Summit Lake Vineyards

Robert Brakesman

Transportation Technology Center, Inc.

Benjamin Bakkum

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Yankee Machine Shop

John Alverson

Schuler Scientific

Elizabeth De Pourbaix
William Schuler

Target Corporation

Matthew Howard

Virginia Dept. of Ag. and Consumer Services

Dale Chenoweth
Jonathan Lester

YRC Freight

James Faas

Jason Aho

Valuable Training Comes to the Micronesia Area

By Brett Gurney, Utah Dept. of Agriculture and Food Weights and Measures Program Manager



The Micronesia area received training on checking the net contents of packaged goods using *NIST Handbook 133* methods November 14-18, 2016. The training was held in Saipan, Commonwealth of the Northern Mariana Islands. This class consisted of 25 students from 7 jurisdictions: Saipan, Tinian, Rota, Guam, Palau, Chuuk, and the Marshall Islands. The five-day class taught students how to apply *NIST Handbook 133*, Checking the Net Contents of Packaged Goods requirements. Multi jurisdiction uniformity was encouraged and provided inspectors the knowledge of proper verification techniques of checking the net contents of packaged goods.

Conference on Weights and Measures (NCWM), Associate Membership Committee (AMC), the Utah Department of Agriculture and Food, and the National Institute of Standards and Technology (NIST) for helping make this training possible. I was honored and excited to be part of something that may have a huge impact for the Micronesian region of the world. Not everyone in the weights and measures profession gets a chance to make such a positive impact on so many people. I was met by a motivated group of people who were excited to learn basic procedures for the *NIST Handbook 133*, *Checking the Net Contents of Packaged Goods* course. It's exciting to see how this helps jurisdictions who need training gain the knowledge needed to perform inspections successfully.



The training was a huge success. The facilities were ideal for the class.

All the students that registered for the course attended, participated, and were actively engaged. It was a great opportunity to learn how other weights and measures programs operate in other parts of the world.

Time was spent discussing the process of the National Conference on Weights and Measures and the regional associations. The importance of involvement by voting on regulatory issues is essential for success for any weights and measures program.

I believe these jurisdictions will continue to utilize what they learned. Saipan has already started implementing the concepts introduced using what they learned in their package checking inspection program. They are prioritizing and acquiring new standards and getting existing standards re-certified through a NIST recognized metrology lab. Saipan and other jurisdictions would like to be more involved and participate in the NCWM. They would like to become members of the Western Weights and Measures Association (WWMA) and work closely within their region for any support and resource. Some jurisdictions have limited equipment and training opportunities available. This is the first training experience for some of the participants. They want to continue their education in NIST Handbook 133, and other weights and measures disciplines. I encourage all members of NCWM to assist these jurisdictions in any way possible. They are eager to improve their programs. It was exciting to see officials from the various islands learn the concepts of proper equipment, testing methods, and procedures.

It is my understanding that Palau, Chuuk, and the Marshall Islands have limited programs with very little weights and measures oversight. They see the importance in the program and wish to introduce it to their leaders in hopes to reduce fraudulent practices and excessive economic errors.

Most packages are imported to the area from other parts of the world. It's important that scales are used properly when packaging products. It's just as important that packaged products contain the amount indicated on the label in the fifty states as it is in territories, commonwealths and other parts of the world.

Gov. Ralph D.L.G. Torres (of the Northern Mariana Islands) reported earlier this year that the primary objective of this training is to educate local officials about the uniform weights and measures regulations published by the National Institute of Standards and Training (NIST).

"With increased economic activity, accurate weights and measurements across the board are a priority. The Northern Mariana Islands Department of the Interior noted that the Commonwealth of NMI estimates \$3 million in annual losses to fraud due to inaccurate weights and measurements in connection with more

than 6,000 40-foot containers which arrive at the Saipan seaport each year. Efforts to decrease these losses and prevent fraud will positively impact our community and our regional partners," Torres said.

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Torres also said, "The training class was the first opportunity to train stakeholders in this region of the world about U.S. standards, test procedures, and proper equipment to support local regulation compliance."

<http://www.mvariety.com/cnmi/cnmi-news/local/90668-commerce-to-conduct-training-on-weights-and-measurements>

Implementing a package inspection program that follows recognized standards helps identify errors and fraudulent activities. It's important that scales are used properly when packaging products. Small errors in packaging processes may end up costing millions of dollars to both consumers and businesses. Training inspectors on standardized procedures and regulations is important. weights and measures programs are essential for maintaining equity in the marketplace and reducing fraudulent practices.





National Conference on Weights and Measures

1135 M Street, Suite 110 / Lincoln, Nebraska 68508

Event Calendar

March 2017

NTEP Lab Meeting

Annapolis, Maryland
March 28 - 30

May 2017

NTEP MDMD/Software Meeting

Columbus, Ohio
May 2 - 3

NEWMA Annual Meeting

Saratoga Springs, New York
May 15 - 18

CWMA Annual Meeting

Lincoln, Nebraska
May 22 - 25

July 2017

102nd NCWM Annual Meeting

Pittsburgh, Pennsylvania
July 16 - 20

Be sure to mark your calendar for all the upcoming NCWM, NIST and regional meetings.

August 2017

NTEP Grain Analyzer Meeting

Kansas City, Missouri
August 16 - 17

NTEP Weighing Meeting

Houston, Texas
August 22 - 23

September 2017

WWMA Annual Meeting

Scottsdale, Arizona
September 24 - 28

October 2017

NTEP Measuring Meeting

Houston, Texas
October 3 - 4

CWMA Interim Meeting

St. Charles, Missouri
October 16 - 18

SWMA Annual Meeting

North Little Rock, Arkansas
October 8 - 11

*Further meeting details will be announced closer to the meeting dates at www.ncwm.net/meetings.