Professional Development Committee (PDC)

2019 Interim Meeting Agenda

Mr. Gene Robertson, Committee Chair
Mississippi

INTRODUCTION

The PDC will address the following items in Table A during the Interim Meeting. Table A identifies the agenda items by reference key, title of item, page number and the appendices by appendix designations. The first four digits of an item’s reference key are assigned from the Subject Series List. The acronyms for organizations and technical terms used throughout the agenda are identified in Table B. In some cases, background information will be provided for an item. The fact that an item appears on the agenda does not mean it will be presented to National Conference on Weights and Measures (NCWM) for a vote. The Committee will review its agenda and may withdraw some items, present some items for information meant for additional study, issue interpretations, or make specific recommendations for change to the publications identified which will be presented for a vote at the Annual Meeting. The Committee may also take up routine or miscellaneous items brought to its attention after the preparation of this document. The Committee may decide to accept items for discussion that are not listed in this document, providing they meet the criteria for exceptions as presented in Section H of the introductions to NIST Handbook 44 and NIST Handbook 130. The Committee has not determined whether the items presented will be Voting or Informational in nature; these determinations will result from their deliberations at the Interim Meeting.

An “Item Under Consideration” is a statement of proposal and not necessarily a recommendation of the Committee. Suggested revisions are shown in bold face print by striking-out information to be deleted and underlining information to be added. Requirements that are proposed to be nonretroactive are printed in bold faced italics.

All sessions are open to registered attendees of the conference. If the Committee must discuss any issue that involves proprietary information or other confidential material; that portion of the session dealing with the special issue may be closed if (1) the Chairman or, in his absence, the Chairman-Elect approves; (2) the Executive Director is notified; and (3) an announcement of the closed meeting is posted on or near the door to the meeting session and at the registration desk. If possible, the posting will be done at least a day prior to the planned closed session.

Note: It is policy to use metric units of measurement in publications; however, recommendations received by NCWM technical committees and regional weights and measures associations have been printed in this publication as submitted. Therefore, the report may contain references to inch-pound units.
Subject Series List

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Other Items ........................................................................................................... OTH Series

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EDU – EDUCATION

EDU-1  I  Professional Certification Program

The NCWM presently has six professional certification exams and two basic competency exams. The certification exams include Retail Motor Fuel Dispensers, Vehicle-Tank Meters, Small Capacity Scales, Medium Capacity Scales, Large Capacity Scales, and Basic Package Checking. The competency exams include Basic Weighing Devices and Basic Liquid-Measuring Devices. Certifications must be renewed every five years. The NCWM is implementing a process to notify candidates whose certificates are expiring each quarter.

At the 2018 Annual Meeting, the Certification Coordinator reported on progress on the LPG Liquid Measuring exam. He announced that work was progressing with NIST OWM to implement TP-27, a product of the API, ASTM and Gas Processors Association. TP-27 provides an electronic algorithm for computing temperature corrections to liquid volume that supersedes ASTM Table 24. The work with OWM also corrects minor errors in another table (Table 2) used to calculate uncompensated (gross) errors. OWM used the new tables in training provided in June in Ohio, and they plan to make a broad distribution of the new tables shortly. States will not have to make procedural changes to calculations or forms; just substitute the new tables for the old ones, i.e. new Table 24E for Table 24 and new Table 2 for old Table 2. The NCWM exam will use the new OWM tables and plans to publish them with the exam announcement so people can become familiar with them before taking the exam.

Work is also progressing on the exam for precision scales. These are predominantly Class 1 and Class II devices used in pharmacy, jewelers, and cannabis applications. After that the present priority list has price verification as the next exam in the pipeline. The Committee encourages dialog on the priorities for future development of exams. Please let the Committee know what areas should be getting priority.

The NCWM Board has approved the rules for candidates and proctors. Proctoring is a vital component of any future plans to get our certification program accredited. Executive Director Don Onwiler has worked with counsel to create legal terms of agreement for proctors which will be sent out soon to states so they can begin selecting proctors. The Board decided to send a notice to state directors allowing 30 days for states to get their proctors signed up. After the 30 days, all exams require a proctor. With proctoring in place, the NCWM can begin hosting the basic competency exams. Under the proctoring agreement the proctor’s organization will provide the computer access and ensure details in the proctoring agreement are met. Only materials authorized in the exam announcement will be allowed and these will be collected before the candidate leaves the room.

The process for taking an exam will still require the candidate to log in with their credentials. However, the candidate will only get access to the exam after the proctor logs in with their credentials. The candidate may still log in without a proctor to view their exam history and to reprint certificates. Candidates should take care to retain their credentials for this purpose.

Since the Annual Meeting, a few additional changes had to be made to the proctoring rules. These changes attempt to accommodate states that are proctoring the exam for multiple candidates all at the same time. This can create hardships for the proctoring organization in that they would have to have multiple copies of the allowed reference materials, like Handbooks 44 or 133. The NCWM Executive Director has worked out a compromise that allows the use of an electronic version of the reference materials prepared by NCWM and have this accessible on the computer used to take the exam. Alternatively, they could print hard copies of the pdf file for candidates to use during the exam. The pdf file for Retail Motor Fuel Devices, for example, would include Handbook 44 Introduction, General Code, LMD Code, and Appendices A, C, and D. These pdf files will be accessible through the exam announcement and candidates may download the files to practice with them prior to taking the exam.

In addition, the NCWM has decided to create two tiers of proctors. The first-tier proctor may proctor only basic competency exams for either public sector or private sector candidates. These proctors will be permitted to be direct...
supervisors of the public sector candidates, which is not permitted in the rules originally proposed for professional certification. The second tier may proctor both basic competency exams and professional certification exams. These proctors may not be direct supervisors of the candidates as originally specified in the proctoring rules.

At its spring meeting, the Board reviewed the proposed exit survey questions prepared by the Committee to get feedback on the certification exams. The Committee met during the Annual Meeting to respond to the Board’s concerns regarding the length of the survey and necessity of specific questions. The Committee streamlined the survey and hopes the survey will be implemented in the near future. After taking an exam, the plan is to provide the candidate with a link to take the survey, and a link to the survey from the certification section of the NCWM website.

**Regional Association Comments:**

**WWMA 2018 Annual Meeting:** The WWMA Professional Development Committee heard no comments during the open hearings. The WWMA fully supports the efforts of the NCWM PDC in developing additional exams, and the administration and improvement of the current exams.

**NEWMA 2018 Interim Meeting:** There were supportive comments for the Professional Certification program to move forward with the precision scale certification exam. With more states adopting the sale of cannabis there will be a growing need for proficiency in this area.

**SWMA 2018 Annual Meeting:** The Chairman informed the conference that since the proctoring started September 1st, the process is working well. No other comments were received.

**CWMA 2018 Interim Meeting:** No comments received.

## EDU-2 I Training

The purpose of this item is to share best practices and approaches to training in response to the broad training needs of weights and measures jurisdictions and to serve as a link to various training materials on the web.

Tina Butcher (NIST OWM) has continued to provide updates on training provided to the weights and measures community by NIST OWM. At the 2018 Interim and Annual Meetings, Mrs. Butcher provided updates on OWM training for federal fiscal year 2017 and 2018, including upcoming training in the remainder of 2018 and 2019. At the 2018 NCWM Annual Meeting, the Committee agreed that OWM can simplify this in the future by reporting activities based on the calendar year. A full listing of courses completed in 2017 and 2018 can be found in the 2018 PDC Final Report. Upcoming OWM training for the remainder of 2018 and the first part of 2019 is included below for reference.

### Packaging & Price Verification
- NIST HB 133 – Checking the Net Contents of Packaged Goods, Basic
  - Upcoming: April 1-4, 2019 – Gaithersburg, MD
  - Upcoming: April 15-18, 2019 – Glendale, AZ

### Laboratory Metrology
- Fundamentals of Metrology
  - Upcoming: October 29 - November 2, 2018; Feb 4-8, 2019; Feb 11-15, 2019
- Mass Metrology Seminar
  - Upcoming: Oct 15-26, 2018; March 11-22, 2019
- Advanced Mass Seminar
  - Upcoming: August 13-23, 2018; April 29-May 9, 2019
- Volume Metrology
  - Upcoming: August 12-16, 2019
- Selecting Field Standards/Hoisting & General Safety
  - Upcoming: September 2018 – WWMA - WY
- Regional Measurement Assurance Programs (RMAPs)
  - MidAmerica Measurement Assurance Program (MidMAP)
    - Upcoming: October 1-4, 2018
  - Southwestern Measurement Assurance Program (SWAP)
    - Upcoming: September 17-20, 2018
  - Northeast Measurement Assurance Program (NEMAP)
    - Upcoming: September 10-13, 2018

Weighing and Measuring Devices
- LPG Liquid-Measuring Systems
  - Upcoming: Spring 2019 - TN
- Vehicle-Tank Meters
  - Upcoming: Spring 2019 - KS

General
- Measurement Systems for Legal Metrology – New Webinar
  - Intro to measurement system basics, including the use of unit symbols, prefixes, and transitioning within/between measurement systems. Ideal for those unfamiliar with performing unit conversion calculations.

A complete list of upcoming OWM training events is available on the calendar of events on the OWM website at:

https://www.nist.gov/pml/weights-and-measures/about-owm/calendar-events

Ms. Butcher noted the NIST Office of Weights and Measures (OWM) has been asked by multiple Regional Weights and Measures Associations (Regionals) to offer training seminars in conjunction with their annual meetings. OWM welcomes and appreciates the opportunity to offer training in this venue and reach multiple jurisdictions at once. To assist in planning for training in 2019 and in developing materials for future courses, OWM has asked for feedback from each Regional. Drawing from its full list of training topics, OWM identified topics on which OWM is prepared to offer training at the 2019 Regional meetings (and would lend themselves to the time constraints of a Regional) as shown below and distributed this list to each Region’s main point of contact at the beginning of June.

Packaging and Labeling and Price Verification:

<table>
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<th>Topic</th>
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<tr>
<td>Price Verification Test Procedures (1-2 days)</td>
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<tr>
<td>Uniform Packaging &amp; Labeling Regulation (4 days)</td>
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<tr>
<td>NIST Handbook 133 – Chapters 1 and 2, Gravimetric Testing (4 days)</td>
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<tr>
<td>NIST Handbook 133 – Chapters 1 and 2, Gravimetric Testing – Overview (1 day)</td>
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Devices:

- Livestock and Animal Scales (3 days)
- Medium-Capacity Scales (3 days)
- Retail Computing Scales (3 days)
- Retail Motor-Fuel Dispensers Short Course (3-1/2 days)
- Selection and Testing of Reference Scales (1 day)
- Vehicle and Axle-Load Scales (3 days)
- Vehicle-Tank Meters (3 days)

OWM hopes to identify one or two training topics that would be of interest to multiple Regionals to help maximize the use of its resources in preparing for the training. OWM is also seeking feedback from the Regionals and others on ideas for future topics that may be needed to assist jurisdictions with addressing changes in technology and marketplace practices.
OWM discussed these training options with the regions during their scheduled meetings Wednesday morning at the Annual Meeting. Mrs. Butcher also noted OWM would like to use a similar approach of obtaining regional input each year to help OWM better meet any requests for training by OWM that the regions might have.

Regional Association Comments:

WWMA 2018 Annual Meeting: The WWMA Professional Development Committee heard the following comments during open hearings:

- John Young (Yolo County, CA) would like to have the following training offered by NIST at the WWMA annual meeting: Gravimetric testing for mass flow meters and liquid measuring devices such as CNG, LNG, Hydrogen, and bulk oil; electric vehicle charging stations; and training on how to select the proper master meter for different products.
- Tina Butcher (NIST OWM) would like the various regions to begin discussions as early as possible regarding training requests for the 2020 and beyond regional meetings. There are a limited number of NIST trainings courses that will fit into the schedule for a regional meeting, the NIST OWM would like each region to prioritize the type of trainings from the list currently offered by NIST. Other considerations would be equipment requirements available to conduct the training.
- Kipp Blauer (NV) would like precision scale training focused on scales used to weigh tobacco-like products. Training should be targeted on the practical use of the scales, rather than NTEP requirements.
- Tina Butcher stated that NIST, being a federal government agency, could not conduct training specifically related to the cannabis industry.
- Kevin Merritt (ID) would like training on gravimetric testing of bulk oil meters.
- Marco Mares (San Diego County, CA) would also like to see a course on gravimetric testing.
- Cathy Fisher (Santa Barbara County, CA) would like training on precision scales and package labeling. Cathy also mentioned that the 2018 Farm Bill now allows the growing of industrial hemp in all states with regulatory programs.
- Jerry Johnson (WY) would like training on forklift scales.
- Tina Butcher suggested the WWMA PDC committee poll the western region states to select the top three topics for training offered by NIST at the regionals.
- Stan Toy (Santa Clara County, CA) wanted clarification as to whether gravimetric training currently offered by NIST would be applicable to the bulk oil and other device training requested by other jurisdictions. Tina responded that this training was focused on packaged products.
- Brett Gurney (UT) would like training on audit trails.

NEWMA 2018 Interim Meeting: Concerns were given regarding the ability to send multiple employees to out of state training due to budgetary issues. States can have different training qualifications for inspectors and sealers. Walt Remmert (PA) voiced support and a desire for NIST to produce video training that can be easily accessed by jurisdictions. Videos on inspections and EPO’S would be valuable for jurisdictions to use. Related comments were made that this form of recorded on line education could reach many more inspectors than hands on training. Recommendations for Safety to be included in future training was supported. The committee encourages NIST to explore the possibility of producing video trainings that can be made available to jurisdictions. The Committee would like to thank our NIST partners for their continued assistance with training and technical work.

SWMA 2018 Annual Meeting: The chairman informed the conference that NIST will use the top 4 or 5 training topics from the list submitted by each of the regions for future training.

CWMA 2018 Interim Meeting: A regulator requested that all NIST online training modules to be online and easily accessible.
EDU-3  Instructor Improvement

NIST OWM has provided legal metrology training for weights and measures jurisdictions and industry for many years but does not have the resources to respond to the numerous training requests it receives. OWM has long recognized that there are many individuals with extensive legal metrology experience who have the skills needed to provide this type of training. OWM hopes to draw from this pool to develop trainers who can present schools with NIST, thus leveraging NIST resources; providing more timely classes; and providing a way to more broadly share the valuable expertise these individuals possess.

Several years ago, OWM renewed its efforts to develop trainers by providing a grant to the NCWM which is intended to pay travel costs of individuals to travel within their regions to conduct training and to participate in NIST training for trainers. This partnership has enabled NIST to bring in candidates for NIST-sponsored training such as “train the trainer” classes and to participate in NIST technical training schools. Through an application process, in collaboration with weights and measures directors and nominated training candidates, NIST has identified a group of people who are now working with NIST to develop the knowledge, skills, and abilities to work with NIST staff in presenting technical training schools. A number of candidates in the NIST Trainer Program have already served as co-instructors for NIST technical training schools and have done an excellent job. OWM sincerely appreciates the willingness of those trainers and their directors who have supported their participation to devote time to making these seminars successful.

NIST training seminars on field inspection topics are only held a limited number of times each year. This poses a challenge in sustaining regular interaction and involvement of NIST trainer candidates. NIST does not have the resources to develop and sustain the development of all the trainers it has invited to participate in the NIST trainer program activities and events held over the past several years; however, even if a candidate is not designated to participate as an instructor in a NIST seminar, they and their jurisdictions can benefit from the experience and the candidate can still provide valuable training in their jurisdiction and region.

A list of all people who have attended a NIST “Train the Trainer” class or associated event has been posted on the NCWM website. Many people on this list have attended NIST “train the trainer” events and workshops but have not served as co-instructors for NIST classes and, in some cases, have not attended NIST technical training schools in the areas in which they are interested in serving as trainers. Conversely, there are people on this list who have attended the workshops and NIST technical training seminars and have also served as co-instructors in NIST training seminars. Because of the variations in experience levels of individuals on this list and because OWM has not authorized anyone (external to NIST) to independently present “NIST” classes and is still refining the program infrastructure, confusion has arisen in the weights and measures community regarding classes that these individuals may present on their own. NIST and NCWM are considering how to best depict these listings to reflect the status of the trainers listed such that confusion can be avoided in the future.

OWM appreciates the strong support of the NCWM, the PDC, the volunteer trainers, and their administrators in continuing to develop the NIST Trainer Program. OWM will continue to provide the Committee with updates on its progress as well as continue to collaborate with and support the Committee in its work.

The Committee continues to hear comments from States expressing appreciation for the NCWM Professional Certification Program and the NIST Training Program. The Committee also heard favorable comments about the training materials and tools provided by NIST, including a video on testing retail motor-fuel dispensers (RMFDs). As noted in Item 410-2, the NIST video is divided into segments focusing on specific parts of the RMFD test procedure that can be used to supplement and enhance instructor-led training. The video can be accessed through OWM’s home page or by going directly to the following link: http://www.nist.gov/pml/wmd/lmdg/training-materials.cfm.

The Committee has reiterated multiple times in the past that the responsibility for training employees rests with individual organizations (weights and measures jurisdictions and industry alike). While NIST and other training providers offer excellent sources of training and training materials, organizations must develop and manage their own training programs, including developing trainers; establishing individual development plans for employees; and identifying strategies for continually assessing and responding to training needs. The Committee recognizes
that NIST OWM cannot possibly train all weights and measures inspectors in the country. The state and municipal jurisdictions have ultimate responsibility for training and qualifying their personnel. To fulfill this responsibility, jurisdictions should be making individual plans to maintain or bolster their training efforts. NIST OWM should be viewed as one vital resource to support that effort. The Professional Development Committee is another resource. The Committee has created and posted on its website, the “Body of Knowledge” to establish uniform learning objectives for weights and measures professionals. In addition, the Committee has posted a Model Field Training Program document on its website. This program outlines methods to evaluate and document training and offers guidance on training new inspectors and taking steps to ensure their ongoing development.

These initiatives require competent and qualified trainers and a centralized management plan within the jurisdiction. The Committee is continuing to work, in partnership with NIST OWM, to identify the basic competencies of those trainers and training managers so that jurisdictions can find the right people to manage and deliver training internally. It’s not enough just to be technically competent in a subject area to be a good trainer or to effectively manage a training program. It takes other tools, such as:

- ability to assess employee competence and training needs,
- ability to create learning materials from technical material,
- ability to use adult learning techniques adapted to individual and group needs,
- ability to plan training activities and find appropriate training venues,
- ability to find creative ways to deliver training with tight budgets, and
- ability to adapt the overall training program to best serve jurisdiction goals

In 2015 OWM developed a NIST Instructor Training Program Instructor Competency Assessment and Feedback Instrument that can be used as a self-assessment tool by instructors and assist them in identifying and setting goals to strengthen and develop their skills as trainers. Included in this assessment tool is a broad list of competencies for trainers based on a model developed by the U.S. Department of Education (see http://www.pro-net2000.org/cm/content_files/70.pdf for details). For the purposes of serving as a NIST OWM trainer, only a subset of these competencies may be necessary, although some trainers participating in the NIST Trainer Program may be required to master more of them to meet broader training responsibilities within their own agencies. See past Committee reports for additional background.

As previously reported, NIST OWM is authorized by IACET to issue “Continuing Education Units” for certain training seminars and, as part of this authorization, there are certain provisions that an instructor must follow to meet these requirements. NIST Certificates and the accompanying CEUs can only be issued if these criteria are met; this includes ensuring that the material is presented consistent with the learning objectives and interpretations specified by NIST OWM and in the same time frame. OWM staff trainers have completed IACET training courses and are familiar with the procedures that OWM has implemented to ensure compliance with IACET-related requirements for NIST training courses. External trainers in the NIST Trainer Program must also understand these provisions. OWM has presented several short webinars to help its external trainers obtain the necessary training and will continue to seek opportunities to provide this training to those who have not yet completed it.

At the 2016 Annual Meeting, Ms. Butcher reported that NIST is making an additional $100,000 grant to NCWM to support travel and training events for the NIST Trainer program. OWM continues to work on formalizing the NIST Trainer Program. At the 2017 Annual Meeting, Ms. Butcher updated the Committee on progress on “Instructor Improvement” in the NIST Trainer Program. She noted that OWM is continuing to work on the infrastructure of the program, including documenting:

- Procedures for Selection, Evaluation, and Feedback to Instructors
- Instrument - Instructor Competency Assessment and Feedback – Overall
  o Based on US Dept of Education model for overall development
- Instrument - Instructor Competency Assessment - specific courses
- Criteria for Developing Participants in NIST Instructor Training Program and Use of the NIST-NCWM Training Grant
- Instructor Agreement
She noted that OWM information shared this information with NCWM Board of Directors at their meeting May 2017 as a follow-up to discussions and a request at the Board’s January 2017 Meeting. She noted that OWM is beginning to implement these tools with its external trainers and OWM has made continual adjustments to the assessment documents based on experience. For example, the instrument which is used to provide an overall assessment of a trainer’s professional competencies can be used to help a trainer identify personal goals for improving their competencies as a trainer, including both those that NIST would require of its trainers and those that might be required of them in their own jurisdiction. However, the instrument proved overly complex for an individual learning event. Consequently, Georgia Harris (OWM) developed a scaled down version of the instrument that was tailored more toward individual learning events, but that still linked back to the overall competencies. This instrument has been used in at least two classes and a revised version will be used in courses coming up in fall 2017.

Ms. Butcher reported that 10 of OWM’s 44 training sessions in 2016 included non-NIST instructors assisting in the NIST OWM classes. Travel for external trainers serving as co-instructors in these classes is funded using travel from a grant provided by NIST to NCWM. She expressed appreciation to NCWM for its continued assistance in administering the grant and helping make the process of getting the trainers to these courses as smooth as possible.

Ms. Butcher also reported that several instructor training webinars had been offered to external trainers, including webinars on Blooms Taxonomy; learning objectives; and the ADDIE model. She noted that one of NIST’s external trainers audited a “Train-the-Trainer” course offered by the American Management Association and OWM is considering if this might be a course that could be used by prospective NIST instructors in their own personal development as trainers. Ms. Butcher noted that OWM is continuing to involve external trainers in its training efforts and has been increasing their responsibilities in these seminars. She emphasized the significant impact that the external trainers have had on the success of the NIST courses and expressed appreciation for the trainers who give of their time and expertise and the directors who allow the trainers time away to assist with these courses.

Regional Association Comments:

WWMA 2018 Annual Meeting: The WWMA Professional Development Committee heard no comments during the open hearings. The WWMA continues to support the ongoing efforts of the NIST/OWM Train the Trainer Program.

NEWMA 2018 Interim Meeting: No comments received. The Committee both supports and would like to thank our NIST partners for their continued work on improving the skills of trainers.

SWMA 2018 Annual Meeting: No comments received.

CWMA 2018 Interim Meeting: No comments received.

EDU-4 I Recommended Topics for Conference Training

The Board of Directors has charged the Committee with recommending appropriate topics for the technical sessions at future annual meetings. The Board of Directors asks the PDC to review and prioritize possible presentation topics and to submit those to the NCWM Chairman. The Chairman will coordinate with NCWM staff to secure presenters.

The following is a list of technical presentations made at the NCWM since 2009. Presentations given since 2010 are available at www.ncwm.net/meetings/annual/archive.

- Planning and Coordinating a National Market Place Survey (Ms. Rachelle Miller, WI 2017);
- The Life Cycle of Petroleum from Well to Retail (Mr. Prentiss Searles, API 2017);
- The United States Mint at Denver – Gold, Coins and Embezzlement (Mr. Thomas Fesing, 2016)
- Understanding Transportation Network Systems (Ms. Andrea Ambrose Lobato, Lyft and Mr. Bob O’Leary, Uber 2016)
- Regulatory Consideration for Legalized Marijuana (Ms. Julie Quinn, MN and Mr. Nick Brechun, CO 2016)
The Committee also discussed the audience that is typically present at NCWM Annual and Interim Meetings, noting that inspectors and service personnel are not always able to participate in these meetings. The Committee believes it would be beneficial not only to offer training on key issues such as those listed above at the NCWM Annual Meeting, but also to assist in educating inspectors and service personnel on audit trails used in these technologies, particularly in jurisdictions in understanding and educating inspectors and service personnel on audit trails used in these technologies. He noted that, with the current progress of proposals through the NCWM process, the Sector is wrapping up its initial work and suggested that the Sector and its members might be able to assist in addressing these issues.

The Committee also heard comments from Mr. Jim Pettinato (FMC), Chairman of the NTEP Software Sector, who noted that training on issues related to inspection of software-based systems may be beneficial to weights and measures jurisdictions. He noted that, with the current progress of proposals through the NCWM process, the Sector is wrapping up its initial work and suggested that the Sector and its members might be able to assist in addressing these issues. He noted that, with the current progress of proposals through the NCWM process, the Sector is wrapping up its initial work and suggested that the Sector and its members might be able to assist in addressing these issues.

The Committee appreciates the input and ideas that it has received regarding suggested training topics. Based on the comments received during its open hearings, comments from the fall 2015 regional association meetings, past suggestions, and discussions during its Interim Meeting work sessions, the Committee proposes that the BOD consider offering technical presentations on the following topics:

- Verifying Compliance of Software-Controlled Weighing and Measuring Systems
  - This might include the verification of software versions, security, and other metrologically significant issues
- Understanding Transportation Network Systems
- GPS-Based Measuring Systems Used in Applications Other Than Passenger Transport
- Vehicle-Tank Metering Systems “Flush Systems”
- Credit/Debit Card Skimmers

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meetings, but to have the training made available at regional and state weights and measures association meetings where more inspectors and service personnel would be likely to attend. Some aspects of the training might need to be tailored more toward field inspection that weights and measures administration, but much of the content should be the same. The Committee would like to collaborate with regional weights and measures associations to suggest that similar training be provided at the regional level.

At the 2016 NCWM Annual Meeting, the Committee suggested that technical training on safety programs be included at Regional and National Meetings, including an update provided by Julie Quinn at the 2016 Annual Meeting. The Committee received no additional suggestions or comments regarding proposed training topics.

**Regional Association Comments:**

**WWMA 2018 Annual Meeting:** The WWMA Professional Development Committee heard the following comments during the open hearings:

- John Young (Yolo County, CA) recommended training related to the use of cellular phones used in commercial transactions as indicating devices, e.g. Amazon Go, EV charging, and Uber, etc.
- Kipp Blauer (NV) suggested training regarding new skimmer technology and communication with law enforcement agencies.
- Louis Straub (Fairbanks Scales) would like the PDC to consider that often the regional and national committee work sessions are held in conflict with the training seminars. The regional and national committee members and stakeholders are not able to attend the training seminars that are being offered. The field trip to the Magellan Pipeline at the NCWM Annual Meeting in Tulsa, OK. was well attended and these types of field trips might be a better alternative to the training seminars.
- Dick Suter (Richard Suter Consulting) suggested training related to the rental of electronic scooters using cell phones.

**NEWMA 2018 Interim Meeting:** No specific recommendations for future training topics for the Annual Meetings were made. There were many positive comments regarding the field trip that took place at the Tulsa OK annual meeting and an openness to consider doing something similar going forward. The Committee supports alternative technical sessions such as field trips where appropriate.

**SWMA 2018 Annual Meeting:** Don Onwiler (NCWM Executive Director) commented that we may want to receive from the group not only topics for conference training, but industry type tours like the one of the Magellan Terminal at the NCWM annual conference in Tulsa, OK. The Chairman received no other comments on this item.

**CWMA 2018 Interim Meeting:** Regulators requested that technical training be given on Livestock Scales and Monorail Scales. They would also like to see 1-2 hour training course be given for (e) verification divisions and (d) divisions. Training was requested for digital density meters. There will be technical training on Retail Motor Fuel Meters given in Canton, OH on May 6-9th, 2019 during the CWMA Annual conference running concurrently with the conference. Chris Guay from Proctor & Gamble will also be providing some training on Packaging/Labeling at the CWMA conf on May 6-9th, 2019 in Canton, OH.

**PMT – PROGRAM MANAGEMENT**

**PMT-1 I Safety Awareness**

One of the goals of the PDC is to educate jurisdictions on safety issues and to provide resources to help them implement effective safety and health management programs. The Committee intends to use the safety page on the NCWM website (https://www.ncwm.net/resource/safety) as a place for states to share information and resources to help them address each of the major steps in creating and maintaining an effective safety program.

In July 2017, the Board of Directors created the Safety Task Group to create a safety tool kit to help weights and measures organizations create or improve their own safety programs. As of the 2018 annual meeting, the toolkit is nearly complete and should be posted soon on the NCWM website.
At the 2018 annual meeting, the NCWM BOD decided to make the task group a permanent sub-committee associated with the PDC. The newly formed Safety Awareness Subcommittee (SAS) will assume responsibility for:

- Maintaining and updating the safety toolkit
- Writing and deploying the NCWM annual safety survey, as well as reporting on the results each year
- Finding resources and/or developing weights-and-measures-focused materials relating to the top hazards identified through the safety survey or through developing the toolkit
- Building a safety culture and developing safety leadership within the NCWM through participation on SAS

The SAS is currently working to improve the annual safety survey by:

- Including questions about near-miss incidents and about incidents resulting in lost or restricted time over multiple years
- Contacting counties and associate members to increase participation
- Writing an instruction guide to help participants gather the information they need before completing the survey

The results of the 2018 survey were consistent with 2016 and 2017 results. Seven injuries were reported which resulted in days-away or lost time. All incidents occurred in the field. Five of them were related to lifting/bending/twisting. The other two were related to slips/trips and falls. Six of the resulting injuries were soft tissue injuries (sprains, strains, torn joint ligaments, etc.) The remaining injury was a back/neck injury.

Although the survey does not currently ask about near-miss incidents, several jurisdictions have shared information about near-miss incidents which resulted in no days-away or lost time. When the results of all three annual surveys are compiled, the top four causes of near-misses are the same as the top four causes of DART incidents.

**Regional Association Comments:**

**WWMA 2018 Annual Meeting:** The WWMA Professional Development Committee heard no comments during the open hearings. The WWMA PDC continues to support the importance of safety and the work being done by NCWM.

**NEWMA 2018 Interim Meeting:** Walt Remmert (PA) volunteered to take a lead for NEWMA on training topics including Safety. He stated that Julie Quinn might be utilized to assist with safety training. Pennsylvania paid for all state W&M employees to attend the 10-hour OSHA class.

Michael Sikula (NEWMA Regional Safety Liaison) gave a detailed report on the concerns and issues related to using 100-gallon provers to test gasoline meters. NY will be developing a Powerpoint presentation to assist in the training of inspectors in NY on the hazards of testing these meters used for gasoline. The Committee and NEWMA would like to thank Mr. Sikula for his continued contributions as the Regional Safety Liaison. The Committee would like to thank Julie Quinn and the Safety Committee for their ongoing contributions to the Safety section of the PDC. The Committee supports ongoing training and education on Safety Issues.

**SWMA 2018 Annual Meeting:** The Chairman received no comments on this item.

**CWMA 2018 Interim Meeting:** Julie Quinn (MN) gave an overview of the game (Luck of the Draw) which she will present to the members on Wednesday Oct 17, 2018, reviewed the safety survey results and stated that property damage will be added to the survey.
Mr. Gene Robertson, Mississippi | Committee Chair  
Mr. Marc Paquette, Vermont | Member  
Mr. Marco Mares, San Diego County, California | Member  
Ms. Jean Kliethermes, Missouri | Member  
Mr. Scott Ferguson, Michigan | Member  
Mr. James Pettinato, FMC Technologies Measurement Solutions, Inc. | AMC Representative  
Ms. Julie Quinn, Minnesota | Safety Liaison  
Ms. Tina Butcher | NIST Liaison  
Mr. Ross Andersen | Certification Coordinator  

Professional Development Committee