A five day Packaging and Labeling class was held in Arcadia, California, April 7 to 11, 2014. This five day class was taught by Office of Weights and Measures’ (OWM) Laws and Metric Program staff members Lisa Warfield and David Sefcik. The class had 26 participants.

The objective of the class was to teach students how to interpret requirements under Handbook 130, Uniform Laws and Regulations in the Areas of Metrology and Engine Fuel Quality, Uniform Packaging and Labeling Regulation (UPLR) section. Students learned how to explain, demonstrate, and apply the UPLR to everyday packaging of consumer and non-consumer commodities, determine the appropriate method of sale for various products, and recognize and evaluate various package labelings in the marketplace.

This training is available to the states and can be requested through our office (email: owm@nist.gov). You can also check the Calendar in this newsletter or on the OWM website for other training opportunities that are currently being offered. OWM’s website URL: http://www.nist.gov/pml/wmd/.

The Editor

HAVE YOU CHECKED OUT THE TRAINING CALENDAR?
Welcome to the Minecraft Measurement Units Video Challenge!

Byline: Mark Esser, NIST Public and Business Affairs Office

The NIST Public and Business Affairs Office has announced the Minecraft Measurement Units Video Challenge (http://www.nist.gov/public_affairs/minecraft.cfm). Your Challenge (should you choose to accept it) is to create one or more video clips in Minecraft that teaches others about what the seven units of the International System of Measurement (SI) are or why they are important in a fun way. Participants should post a link to your completed videos in the comments on the NIST YouTube channel (http://youtu.be/SRjDOh6d7PQ).

Rules:
- The total running length of each clip should be no longer than 20 seconds.
- Only one SI unit should be featured per clip.
- Videos must be G-rated.
- Do your own work, please.

The seven base SI units are (Link to this URL: http://www.nist.gov/pml/wmd/metric/si-units.cfm):

1. Meter (m)—length, used for measuring the distance between things;
2. Second (s)—time, there are 60 of them in a minute;
3. Ampere (A)—an amount of electric current, quite shocking;
4. Candela (cd)—brightness, the amount of useful light (light humans can see by) an object emits;
5. Kelvin (K)—temperature, this unit tells you how hot or cold something is;
6. Kilogram (kg)—mass, a measure of the amount of matter an object has, related to, but not the same as, weight; and
7. Mole (mol)—an Avogadro’s number’s worth of “entities,” like a chemist’s, as opposed to a baker’s, dozen (One mole of something has 6.022 x 10^23 atoms or molecules.)

Good luck!

For more exacting definitions, see the NIST reference on constants, units, and uncertainty webpage (http://physics.nist.gov/cuu/Units/).

Calendar 2014

Registration for training in the NIST Office of Weights and Measures is handled by Yvonne Branden at yvonne.branden@nist.gov.

Course descriptions can be viewed on the Office of Weights and Measures website at http://www.nist.gov/pml/wmd/calendar.cfm and clicking on the name of the course.

May 19 - 22 (4 days)
Central Weights and Measures Association (CWMA) Annual Meeting
St. Louis, MO
Contact: Sherry Turvey at sherry.turvey@kda.ks.gov

May 22
NIST Training at the Central Weights and Measures Association (CWMA) Annual Meeting - Evaluating Performance, Learning Objectives, and Training Effectiveness for Managers
Class No. 5310
St. Louis, MO

June 2
Webinar - NISTIR 6969 - SOP 8, Part 1
10:00 a.m. to 12:00 p.m.
Class No. 5315

Webinar - Calibration Method Validation
2:00 p.m. - 4:00 p.m.
Class No. 5317

June 3
Webinar - NISTIR 7383 - SOP 18, Part 1
10:00 a.m. - 12:00 p.m.
Class No. 5318

Webinar - Software Verification and Validation
2:00 p.m. - 4:00 p.m.
Class No. 5319

June 4
Webinar - OWM and NVLAP Application (Submission) Processes
10:00 a.m. - 12:00 p.m.
Class No. 5330

Webinar - NISTIR 6969 - SOP 8, Part 2
2:00 p.m. - 4:00 p.m.
Class No. 5316

June 5
Webinar - Conducting an Effective Management Review
10:00 a.m. - 12:00 p.m. (cont’d on pg 3)
Don’t miss your chance to participate in the 2014 “Week of Webinars.” Enroll today as registration deadlines begin three weeks before each event! Use the OWM Contact System (https://tsapps.nist.gov/WMD/default.aspx) to submit your training request. The current fee for these two-hour webinars is $199 and confirmed participants will be provided a link to make a payment. Registration fees for weights and measures metrologists and regulatory officials are funded by NIST OWM. Pre-work assignments and payment are due two weeks prior to each webinar. Pre-work assignments will be provided to participants with the confirmation letter and instructors will provide log-in instructions before each event.

Who should attend? Laboratory staff who have responsibilities for developing, implementing, and/or improving the quality management system and/or technical system in their laboratory, as well as those who are seeking OWM recognition and/or accreditation or improvements to support recognition/accreditation will be interested in these courses. Most webinars are available for both state and non-weights and measures laboratory staff. Wednesday’s OWM and NVLAP Application (Submission) Processes is open to weights and measures laboratory staff and administrators. Friday’s Traceability Assessments for Weights and Measures is open to weights and measures field officials and administrators.

Learning event descriptions are available on the OWM Training Calendar (http://www.nist.gov/pml/wmd/calendar.cfm).

**Weights and Measures**

**Historical Moment**

**DID YOU KNOW?**

From the Report of the Third Annual Conference on Weights and Measures of the United States, May 16 and 17, 1907.

Looking at the past reports, one realizes that the concerns of 1907 are not much different from those of today. The desire to establish and publish “uniform” standards for use in the United States was very much on the minds of the early weights and measures officials that attended those first annual meetings. First concern was establishing a working structure, which was briefly hit upon in the last newsletter. This structure was necessary to create a cooperative and productive environment to work on developing measurement standards in a country made up of multiple jurisdictions under one giant umbrella of a “Nation.” Early on, the realization of the importance to protect the consumer be it industry or the individual was a major concern for our country.

Dr. E. B. Rosa, Acting Director of the National Bureau of Standards began the first session of this third meeting inviting the attendees to take the opportunity to tour the various laboratories where weights and measures were tested and other laboratories as well. Dr. Rosa emphasized that much of the work carried out at the Bureau depended greatly on the standards of length and...
**WEEK OF WEBINARS SCHEDULE**

<table>
<thead>
<tr>
<th>Date</th>
<th>Start Time (ET)</th>
<th>Webinar Title</th>
<th>Course Number</th>
<th>Instructor</th>
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<tr>
<td>06/02/2014</td>
<td>10:00 a.m.</td>
<td>NISTIR 6969 SOP8, Part 1</td>
<td>5315</td>
<td>Val Miller</td>
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<td>06/02/2014</td>
<td>2:00 p.m.</td>
<td>Calibration Method Validation</td>
<td>5317</td>
<td>Georgia Harris</td>
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<td>5319</td>
<td>Val Miller</td>
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<td>Software Verification Application</td>
<td>5318</td>
<td>Georgia Harris</td>
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<td>06/04/2014</td>
<td>10:00 a.m.</td>
<td>OWM and NVLAP Application (Submission) Processes *NOT available for non-weights and measures participants</td>
<td>5330</td>
<td>Georgia Harris</td>
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<td>06/04/2014</td>
<td>2:00 p.m.</td>
<td>NISTIR 6969 SOP 8, Part 2</td>
<td>5316</td>
<td>Val Miller</td>
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<td>06/05/2014</td>
<td>10:00 a.m.</td>
<td>Conducting an Effective Management Review</td>
<td>5321</td>
<td>Elizabeth Gentry</td>
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<td>06/05/2014</td>
<td>2:00 p.m.</td>
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<td>5320</td>
<td>Val Miller</td>
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<td>06/06/2014</td>
<td>10:00 a.m.</td>
<td>Uncertainty Budgets for SOP 14 (Gravimetric Volume Calibrations)</td>
<td>5322</td>
<td>Georgia Harris</td>
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<td>06/06/2014</td>
<td>2:00 p.m.</td>
<td>Traceability Assessments for Weights and Measures *NOT available for non-weights and measures participants</td>
<td>5331</td>
<td>Carol Hockert</td>
</tr>
</tbody>
</table>

OWM Training Coordinator:  Yvonne Branden at Yvonne.Branden@nist.gov, (301) 975-3272.
OWM Contact System:  Isabel Chavez at Isabel.Chavez@nist.gov, (301) 975-2128

(continued from pg 3 - Historical Moment)

mass. He elaborated on the work that was being done in the field of electricity to have a standard for measuring electricity. He stated:

As you know, the work carried on in the various departments here depends very much on the standards of length and mass, with which you are chiefly concerned. As, for example, in electrical work we do not have a standard ampere, in the same way that you have a standard meter, to measure electric current, but our electrical measurements depend fundamentally upon these same units of length and mass, with which you are concerned, in addition to that of time, so that when you fix a standard for measurement of electrical resistance, or other units, we are really basing them directly upon the unit of length and the unit of mass as well as the unit of time.

Your work, so far as I understand it, is concerned almost entirely with the measurement of length, mass, and volume, but there may come a time, in the not distant future, when it will be otherwise, possibly looking out also for electrical measurement. It does not seem to be practicable at once, but the testing of electrical measuring instruments is something of very great importance. The work before you is of interest and very great value. There is no doubt whatever that the States ought to get together in the matter of laws concerning weights and measures. It is not a credit to this country that trade should be carried on according to different standards in different States, and this body has within it the power to accomplish a great deal of good in securing uniformity in the laws throughout the country, if they are not observed, and this body has within it the power to stir up public sentiment to the end that the laws may be respected and observed, and enforced, when necessary, by penalties.

(continued on pg 5)
Dr. Rosa continued to speak and this statement is noteworthy, “… it seems to me that this body can bring about measures which should result in great good throughout the country. We are behind other countries in this respect, and it ought not to be many years before the United States should be fully up to the advance made by the leading nations of the world in this particular.” The desire and need to bring our Nation up to the standards of other countries was very much in Dr. Rosa’s mind. He was well aware of the impact weights and measurement standards had on the ability to trade with other countries as well as on interstate commerce. So, you can see, the mission and the foundation for today’s weights and measures programs were set at a very early point in the Conference’s history. We continue to build on the foundation and expand the mission as technology that was once only a small glimmer has emerged. We continually arise to the challenges set before us with mutual cooperation from these United States.

Thank you for reading this “Historical Moment.”

Linda Crown, Editor

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