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## This Month in History

March 1, 1781 - Congress announced the ratification of the Articles of Confederation, which made Congress the governing body of the new national government. This document was the foundation of the original 13 states through the Revolutionary War until 1789, when the current U.S. Constitution was adopted.

March 4, 1681 - King Charles II of England gave a large tract of land to William Penn to settle an outstanding debt. This tract of land became Pennsylvania.

March 4, 1830 - The first meeting under the new Congress under the U.S. Constitution was held in New York City.

March 10, 1862 - The first U.S. government paper currency was put into circulation.

## Weights and Measures Division Finds a New Home

On October 1, 2010, the NIST Weights and Measures Division (WMD) became part of the Physical Measurement Laboratory (PML) when the National Institute of Standards and Technology reorganized its many divisions and programs into a tighter and more mission focused structure.

According to NIST Director, Patrick Gallagher, "The goal of this realignment is to ensure that our laboratory managers have a clear and empowered responsibility to meet NIST's mission of strengthening the U.S. innovation and industrial competitiveness. It's about optimizing our organizations to deliver both forefront research results and the related services needed by manufacturers and other customers critical to the U.S. economy."

The realignment consists of two main components: 1) replacing the old single deputy director position with three career associate directors responsible for NIST laboratory, extramural, and administrative programs; and 2) reducing the number of NIST laboratory units from 10 to 6.

The old management structure consisted of 18 laboratories, extramural program, and administrative units. This structure made it difficult to manage the organization. With the new structure, NIST management will be strengthened and be more efficient and effective in carrying out its mission. The realignment does not change the focus of NIST programs, but will enhance the ability of NIST to work effectively within its own structure.

The Physical Measurement Laboratory mission is to develop and disseminate the national standards of length, mass, force and shock, acceleration, time and frequency, electricity, temperature, humidity, pressure and vacuum, liquid and gas flow, and electromagnetic, acoustic, ultrasonic, and ionizing radiation through activities ranging from fundamental measurement research to provision of measure services, standards, and data.

The realignment has affected the URL for all WMD web pages. The new home page is located at: <http://www.nist.gov/pml/wmd/index.cfm>.

(Information for this article was adapted from the NIST realignment fact sheet and *Tech Beat* article of September 28, 2010.)

# Laboratory Metrology Publication Reviews

By Georgia L. Harris

We are beginning the process of reviewing several NIST Publications covering laboratory metrology topics. These four publications include:

- NIST IR 7082, Proficiency Test Policy Plan
- NIST IR 7214, Quality Manual For Proficiency Testing and Interlaboratory Comparisons
- NIST Handbook 143, State Weights and Measures Laboratories, Program Handbook
- NIST Handbook 105-1, Field Standard Weights and Measures, Class F Weights

We will be accepting comments on the two NIST IR publications through July 1, 2011, and begin working on drafts shortly after that time. We will be accepting comments on the Handbook 143 and Handbook 105-1 through September 30, 2011.

Please submit your comments through the WMD Contact Management System at <https://tsapps.nist.gov/WMD/>. Select Comments from the top menu bar and select whichever publication you want to review. You will need to specifically identify the section for comments and enter your proposed solution or change. Please read the following additional information about each specific topic.

## *Interlaboratory Comparisons and Proficiency Tests*

For anyone interested in the topic of Proficiency Testing and Interlaboratory Comparisons, NIST's Weights and Measures Division has a PT/ILC quality manual, policy, and tools available here:

<http://www.nist.gov/pml/wmd/labmetrology/roundrobins.cfm>

We are working on updating the following two publications and the goal will be to be compliant with the newly approved ISO/IEC 17043 standard:

- NIST IR 7082, Proficiency Test Policy Plan
- NIST IR 7214, Quality Manual For Proficiency Testing and Interlaboratory Comparisons

If you are also a member of NCSL International, work has begun on updating Recommended Practice 15, Laboratory Comparisons, (to improve compliance to ISO/IEC 17043). The following message is from Mike Cadenhead, the Committee Chair:

The Working Group for this review/update of RP-15 solicits your comments and suggestions for improvement. NCSLI Member Delegates can download the RP-15 from <http://www.ncsli.org>. Once logged in, the member delegate can select "Member Services," then "Active Member Pubs," then "2011 Member RPs" links. A listing of all RPs will then be provided from which they can be viewed on screen or downloaded. Please keep in mind the copyright re-

## Calendar 2011

March 10  
Proficiency Testing & Root Cause Analysis (Webinar)  
Contact: Val Miller at [val.miller@nist.gov](mailto:val.miller@nist.gov)

March 14 - 18  
Measurement Science Conference  
Pasadena, CA  
Contact: <http://www.msc-conf.com/msc/index.html>

March 15 - 16  
Software Sector Meeting  
Annapolis, MD  
Contact: [info@ncwm.net](mailto:info@ncwm.net)

March 21 - April 1  
Basic Seminar for States  
NIST/WMD  
Gaithersburg, MD  
Contact: Val Miller at [val.miller@nist.gov](mailto:val.miller@nist.gov)

April 7  
Internal Auditing (Webinar)  
Contact: Val Miller at [val.miller@nist.gov](mailto:val.miller@nist.gov)

April 14  
Basic Uncertainty Concepts (Webinar)  
Contact: Val Miller at [val.miller@nist.gov](mailto:val.miller@nist.gov)

April 21  
Documenting Traceability and Calibration Intervals (Webinar)  
Contact: Val Miller at [val.miller@nist.gov](mailto:val.miller@nist.gov)

April 28  
Software Verification & Validation (Webinar)  
Contact: Val Miller at [val.miller@nist.gov](mailto:val.miller@nist.gov)

May 2 - 6  
Basic Industry  
NIST/WMD  
Gaithersburg, MD  
Contact: Val Miller at [val.miller@nist.gov](mailto:val.miller@nist.gov)

May 12  
Document Control and Recordkeeping (Webinar)  
Contact: Val Miller at [val.miller@nist.gov](mailto:val.miller@nist.gov)

May 16 - 20  
WRAP (members only)  
Anchorage, AK

May 9 - 12  
Northeastern Weights & Measures Association - Annual Meeting  
Saratoga Springs, NY (continued on pg 3)

strictions for NCSLI publications during your review. Post comments here or send me an e-mail.

This message was posted on the NCSLI Group Discussion page on LinkedIn (which is an Open Group). So, you can post there or send Mike an e-mail message: [Mike.Cadenhead@afmetcal.af.mil](mailto:Mike.Cadenhead@afmetcal.af.mil)

Access to the NCSLI Group page does not require membership in NCSLI and we have provided copies of RP 15 to State labs in prior training seminars. (If you can't find it or don't have it, you will need to obtain it from NCSLI and not NIST).

### *NIST Handbook 105-1, Class F Field Standard Weights*

We are seeking your input about the planned update for NIST Handbook 105-1, for Field Standard Class F Weights. This standard was last updated in 1990 and other than a desire to harmonize compliance to international standards, little input has been received on this document since it was last updated. There are several approaches that have been regularly suggested that will impact how we approach preparing a first draft for review. These are the following options we are considering.

1. Withdraw/rescind NIST Handbook 105-1 in favor of OIML R111 adoption.
2. Adopt specific classes of OIML R111 into NIST Handbook 105-1.
3. Revise Handbook 105-1 with as much harmonization to the OIML R111 standard as practical/reasonable.

Please submit your opinions on your preferred approach at a short evaluation here: <https://www.surveymonkey.com/s/105-1WeightsReview>. This survey will end by April 1, 2011. So, please submit your input to help guide the direction we take.

To see a copy of the current Handbook 105-1 for Field Standard Class F weights, you can get it here: <http://www.nist.gov/pml/wmd/pubs/handbooks.cfm>.

Please submit specific technical comments about handbook sections and changes you would like to see in the document through the NIST Weights and Measures Contact Management System. Please do not send comments on the survey or document via e-mail - it will save us a lot of time and effort!

### *NIST Handbook 143, State Weights and Measures Laboratories, Program Handbook*

We are also considering updates to NIST Handbook 143 at this time. This is the Program Handbook by which the NIST Weights and Measures Division Recognizes State Laboratories and issues certificates of Measurement Traceability to support your programs. You can get a copy of the current or past Handbooks here: <http://www.nist.gov/pml/wmd/pubs/handbooks.cfm> or here: <http://www.nist.gov/pml/wmd/labmetrology/lab-resources.cfm> (see Related Links for PDF or DOC versions).

The international standard, ISO/IEC 17025, on which this handbook is based, was recently re-approved without change, which means it will be in place for another five years with no new requirements. So, for sections 4 and 5, we can only accept input on the WMD Notes on interpretation or application as that specific section is based on the documentary standard.

Contact: James Cassidy, at [jcassidy@cambridgema.gov](mailto:jcassidy@cambridgema.gov)

May 16 - 19  
Central Weights & Measures Association  
Annual Meeting  
Grand Rapids, MI  
Contact: Vicky Dempsey at [dempseyv@mcohoio.org](mailto:dempseyv@mcohoio.org)

June 30  
Proficiency Testing & Root Cause Analysis  
(Webinar)  
Contact: Val Miller at [val.miller@nist.gov](mailto:val.miller@nist.gov)

July 7  
Calibration Method Validation (Webinar)  
Contact: Val Miller at [val.miller@nist.gov](mailto:val.miller@nist.gov)

July 14  
Basic Uncertainty Concepts (Webinar)  
Contact: Val Miller at [val.miller@nist.gov](mailto:val.miller@nist.gov)

July 17 - 21  
NCWM Annual Meeting  
Missoula, MT  
Contact: [info@ncwm.net](mailto:info@ncwm.net)  
Website: <http://www.ncwm.net>

July 21  
Documenting Traceability and Calibration Intervals (Webinar)  
Contact: Val Miller at [val.miller@nist.gov](mailto:val.miller@nist.gov)

July 28  
Software Verification & Validation (Webinar)  
Contact: Val Miller at [val.miller@nist.gov](mailto:val.miller@nist.gov)

August 2 - 4  
Packaging and Labeling (Industry Only)  
NIST/WMD  
Gaithersburg, MD  
Contact: Lisa Warfield at [Lisa.Warfield@nist.gov](mailto:Lisa.Warfield@nist.gov)

August 4  
Internal Auditing (Webinar)  
Contact: Val Miller at [val.miller@nist.gov](mailto:val.miller@nist.gov)

August 11  
Management Reviews (Webinar)  
Contact: Val Miller at [val.miller@nist.gov](mailto:val.miller@nist.gov)

August 21 - 25  
NSCLI Annual Conference  
Gaylord National Convention Center  
National Harbor, MD  
Contact: <http://www.ncsli.org>

*(continued on pg 4)*

The remaining sections can be changed, modified, and updated as appropriate. The technical sections are nearly identical to what is currently in the NVLAP Handbook 150-2g (NVLAP will be updating the 150-2 handbooks in the near future to reflect requirements.) If you would like to be a part of any of the working groups that review survey responses, comments, and drafts, and help to prepare various drafts and responses to comments, please send an e-mail to: [gharris@nist.gov](mailto:gharris@nist.gov) and let me know.

Please be assured that everyone will have an opportunity to provide input on near-final and final drafts before they are published, and we will post/send notices of the status through various e-mail/website/newsletter/organizational media.

## W&M NEWS WEB LINKS

### WISCONSIN WEIGHTS & MEASURES IN THE NEWS

Report states that consumers are getting what they pay for. Read further here: [http://host.madison.com/ct/news/local/article\\_9fc33806-345c-11e0-b9bf-001cc4c03286.html](http://host.madison.com/ct/news/local/article_9fc33806-345c-11e0-b9bf-001cc4c03286.html)

### DOES YOUR LUGGAGE NEED TO GO ON A DIET?

Read about Boston's Logan Airport and baggage fees.

<http://boston.cbslocal.com/2011/02/03/i-team-possible-luggage-fee-overcharging-at-logan/>

### GAS PUMP ACCURACY: ARE YOU GETTING WHAT YOU PAY FOR?

Maryland Weights and Measures discuss gasoline pumps pass/fail procedure.

<http://www.fredericknewspost.com/sections/news/display.htm?StoryID=117052>

# Proposed Rules Would Allow Metric Only Labeling for Some Products

*By Mark Esser*

The National Institute of Standards and Technology (NIST) has issued two publications calling for the amendment of labeling laws to allow the voluntary use of only metric units on some consumer products. NIST researchers suggest that adoption of metric labeling will lead to greater agreement between state and federal labeling laws and simplify domestic and international commerce.

The Fair Packaging and Labeling Act (FPLA) specifies the type of information that must appear on a consumer product label, including the kind of product, name of the manufacturer or responsible party, and net contents. Products that aren't covered by the federal law are regulated by the states, which generally follow the guidance of the Uniform Packaging and Labeling Regulations (UPLR), a publication (Handbook 130, Uniform Laws

August 31 - September 1  
Weighing Sector Meeting  
Sacramento, CA  
Contact: [info@ncwm.net](mailto:info@ncwm.net)

September 1  
Calibration Report Evaluation (Webinar)  
Contact: Val Miller at [val.miller@nist.gov](mailto:val.miller@nist.gov)

September 8  
Calibration Method Validation (Webinar)  
Contact: Val Miller at [val.miller@nist.gov](mailto:val.miller@nist.gov)

September 12 - 15  
Central Weights & Measures Association  
Cedar Rapids, IA  
Contact: Vicky Dempsey at [dempseyv@mcoho.org](mailto:dempseyv@mcoho.org)

September 15 - 18  
Western Weights & Measures Association  
San Obispo, CA  
Contact: Brett Saum at [bsaum@co.slo.ca.us](mailto:bsaum@co.slo.ca.us)

October 6  
Annual Submission Process (Webinar)  
(Limited to State Laboratory Participants)  
Contact: Val Miller at [val.miller@nist.gov](mailto:val.miller@nist.gov)

October 12 - 13  
Northeastern Weights & Measures Association  
Interim Meeting  
Norwich, CT  
Contact: James Cassidy at [jcassidy@cambridgema.gov](mailto:jcassidy@cambridgema.gov)

October 13  
Document Control & Recordkeeping (Webinar)  
Contact: Val Miller at [val.miller@nist.gov](mailto:val.miller@nist.gov)

October 16 - 19 (tentative)  
Southern Weights & Measures Association  
Contact: Dale Saunders at [dale.saunders@vdacs.virginia.gov](mailto:dale.saunders@vdacs.virginia.gov)

November 10  
Annual Submission Process (Webinar)  
(Limited to State Laboratory Participants)  
Contact: Val Miller at [val.miller@nist.gov](mailto:val.miller@nist.gov)

## Calendar 2012

January 22 - 25  
NCWM Interim Meeting  
New Orleans, LA  
Contact: [info@ncwm.net](mailto:info@ncwm.net)

**Webinars** are conducted by the WMD Laboratory Metrology Group. You can get additional

and Regulations in the areas of Legal Metrology and Engine Fuel Quality) produced by NIST and the National Conference on Weights and Measures (NCWM). The rules in the UPLR are recommended regulations that only become law if and when adopted by individual states.

In 1992, NIST and the NCWM supported Congress's decision to amend the FPLA to allow manufacturers to label their products with U.S. customary units (inch/pound/pint, etc.) and metric units (centimeter/kilogram/liter, etc.), known as dual unit labeling. Since then, NIST and the NCWM have been working with the states to help them adopt laws that would permit metric only labeling of products under their jurisdiction. Forty-eight states have adopted this approach.



**From left to right**, cartons A and B feature a dual net quantity of contents statement on the label, as required under the current Fair Packaging and Labeling Act (FPLA). Carton C (far right) features only a metric label, as is recommended by the Uniform Packaging and Labeling Regulation (UPLR), but prohibited by the FPLA. A proposed FPLA amendment would permit U.S. manufacturers to choose either dual or metric labeling for their products.

However, some manufacturers worry that the option to label products solely with metric units will confuse consumers and that it will force manufacturers to redesign product packaging.

To allay these concerns, NIST Metric Program coordinator, Elizabeth Gentry, notes that many products, especially wine and distilled spirits, have been sold with metric-only labels since the early 1980s. A study by her group found that 193 of 1,137 products surveyed in 19 retail stores were labeled with metric units only. More than half of those products were made or distributed by U.S. companies. Moreover, she notes that, under the proposal, use of metric only labeling would be voluntary, as would packaging modifications.

Gentry says there is nothing compelling manufacturers to change package sizing simply because they have the option to use only metric units on their labels. Manufacturers would be free to continue including U.S. cus-

information by contacting Val Miller at:

301-975-3602 or by e-mail at: [val.miller@nist.gov](mailto:val.miller@nist.gov) or viewing the Laboratory Metrology Group web page at:

<http://www.nist.gov/pml/wmd/labmetrology/webinars.cfm>

Additional details on the above calendar items can be found at:

<http://ts.nist.gov/WeightsAndMeasures/calendar3.cfm>

## IN THE FIELD

Is there a W&M topic that you would like to have discussed in the Weights and Measures Connection?

How can we better serve our W&M community?

Do you have a safety tidbit to share?

Do you have a W&M event that you wish to post in the Connection's calendar?

Submissions can be sent to the Editor, Linda Crown at [linda.crown@nist.gov](mailto:linda.crown@nist.gov)

## TRIVIA

The Weights and Measures Act of 1824 in England declared that this measure was equal to "10 imperial pounds weight of distilled water weighed in air against brass weights with the water and the air at a temperature of 62 degrees of Fahrenheit's thermometer and with the barometer at 30 inches." What was this measure?

Answer: The original British Imperial Gallon.

More interesting trivia can be found at: <http://www.foodreference.com/quiz/html/quiz-answers-427.html>

What was the exact length of the "Carolingian foot introduced by Charlemagne when he tried to establish uniform weights and measures throughout the Frankish Empire?

Answer: Exactly a third of a meter, or about 13 and 1/8 inches.

tomary units in the dual unit labeling scheme. The proposed changes to the FPLA would not apply to unit pricing, advertising, recipes, nutrition labeling or other general pricing information.

"We're suggesting these changes to the FPLA in response to requests by U.S. manufacturers and consumers," says Gen-try. "Manufacturers want to take control of the limited space on their packaging and giving them the option of using only metric units will offer manufacturers more flexibility."

Download NIST's Guide to Voluntary Metric Labeling or

<http://www.nist.gov/pml/wmd/metric/upload/Voluntary-Metric-Labeling-Dec2009.pdf>

Download NIST's Labeling Marketplace Assessment or

<http://www.nist.gov/pml/wmd/metric/upload/Marketplace-Assessment-Metric-Labeling-Retail-Stores-Dec2009.pdf>

(This article first appeared in the NIST Tech Beat, June 23, 2010)

## Employee Highlights

### WMD WELCOMES MARC BUTTLER

By Tina Butcher

The Weights and Measures Division is excited to welcome a new staff member, Marc Buttler, to our team! Marc joined our staff on January 19 and comes to us with extensive experience in the area of legal metrology, with an emphasis on measuring devices. Marc holds a B.S. in Mechanical Engineering from the University of Colorado. He spent the last 25 years working for Micro Motion, Inc. (a division of Emerson Process Management) in Boulder, Colorado, where he led and managed national and international measuring system product lines and participated in standards development activities related to legal metrology measurement technology. Marc served for the past five years on the National Type Evaluation Technical Committee's Measuring Sector, the group responsible for developing proposed type evaluation criteria and test procedures for the National Conference on Weights and Measure's (NCWM) National Type Evaluation Program (NTEP), and he also participated in a number of type evaluations. For the past several years, Marc has been an active member of the U.S. National Working Group for the Development of Hydrogen Measurement Standards Device Standards Subcommittee, the group that developed the tentative code for commercial hydrogen measuring devices adopted by the NCWM in July 2010. Marc also brings experience working with international legal metrology standards, having actively participated in U.S. National Work Groups (USNWGs) on measurement-related International Organization of Legal Metrology (OIML) recommendations, including R 117, "Dynamic volume and mass measurement for liquids other than water," and R 139, "Compressed gaseous fuel measuring systems for vehicles," for nine years.

In his new role at WMD, Marc will spend the bulk of his time working in the Legal Metrology Devices Group, where his primary duties include serving as technical advisor to the NTETC Measuring Sector; serving on the USNWG on Hydrogen Measurement subcommittees on Devices and Fuel Quality; participating in the development of national and international standards related to commercial measuring instruments; developing and delivering training materials; developing test procedures; and researching and developing solutions to a wide variety of measurement-related legal metrology issues. In addition to his work in the Devices Group, Marc will spend a portion of his time working with the Laws and Metric Group in the area of biofuels.

The NIST Weights and Measures Division has a new homepage at:

<http://www.nist.gov/pml/wmd/index.cfm>

Please change your browser's bookmark.