President’s Address
National Conference on Weights and Measures
San Antonio, Texas
July 14, 2009

Dr. Belinda Collins
NIST, Technology Services Director

Dr. Belinda Collins addressed the National Conference on Weights and Measures Annual Meeting attendees in San Antonio, Texas, on July 14, 2009. Her presentation which touched on the National Institute of Standards and Technology’s (NIST’s) mission to promote U.S. innovation and industrial competitiveness by advancing measurement science, standards, and technology in ways that enhance economic security and improve our quality of life. The presentation gave an overview of the services that Technology Services (TS) provides, and TS’s commitment to advancing standards and supporting the U.S. commercial measurement system. Dr. Collins concluded by stating that it is “essential for NIST and NCWM to work together in these difficult times in complementing each other’s work, working towards securing uniformity in weights and measures, and seeking creative ideas for supporting the whole weights and measures infrastructure.”

You are invited to review the following slide presentation, which was used at the Annual Meeting.
National Conference on Weights and Measures – NIST Address

Belinda L. Collins, Ph.D.
Director, Technology Services
July 14, 2009

Outline
- Introduction to NIST
- Weights and Measures
- What are NIST roles?
- What are the major issues?
- What does the future hold?

NIST Today: Mission
- To promote U.S. innovation and industrial competitiveness by advancing
  - measurement science,
  - standards, and
  - technology
- in ways that enhance economic security and improve our quality of life

The NIST Laboratories

Technology Services Provides
- Access to NIST Standard Reference Materials and Data, calibrations, and laboratory accreditation
- Federal leadership, guidance, coordination, information and training on documentary standards and conformity assessment activities
- Weights and Measures (Legal Metrology) training, recommendations and guidelines
- Technology partnerships, including patents, licenses, cooperative agreements, etc
- Technical information and access to NIST publications

Advancing Standards - Support for U.S. Commercial Measurement System
- Develop standards and test procedures for weights and measures to ensure equity in commerce
  - Harmonized national and international standards
  - Input to National Conference on Weights and Measures (NCWML), International Organization of Legal Metrology (OIML)
- Technical guidance to industry, retailers, and regulatory officials
  - Training for weights and measures officials in device inspection, pre-packaged goods, laboratory metrology, price scanner inspections, and weights and measures administration
  - Laboratory metrology training and support
  - Legal metrology laboratory training facility
What is Weights and Measures?

- Technical and regulatory infrastructure that supports selling and buying of products or services on the basis of weight, measure or count
- Responsibilities shared among federal, state and local governments with the bulk residing with the latter
  - NIST Organic Act — Directs cooperation with the States in securing uniformity in weights and measures laws and methods of inspection

Why Weights & Measures?

Ensure uniformity and equity in the marketplace

- Consumers want what they pay for.
- Businesses want fair compensation.
- Industries want fair competition.
- Manufacturers want “One standard, one test, accepted worldwide.”

NIST Role

- Provides standards, model laws and regulations, technical expertise and training to state and local weights and measures officials
- Obtain uniformity and provide traceability to fundamental units through cooperation, standards development and training
- No Federal regulation of weighing and measuring devices except for US Department of Agriculture (USDA)
- NIST has no police power or authority over the States
  - Works in cooperation with states directly and with the NCWM toward equity in commerce throughout the United States

Enforcement is Typically Through U.S. Weights and Measures Jurisdictions*

*the number of jurisdictions and percentages are estimates only
State Metrology Laboratories

- Most states have a state run laboratory
  - Some counties and territories
- Metrologists trained at NIST in our training laboratory for mass, volume and length calibrations
- Required to comply with NIST Handbook 143 for certificate of traceability
  - Requirements are Identical to ISO 17025

NIST WMD Activities

- Coordination
  - Responses to regulatory issues to promote uniformity and fair trade.
- Technical Support to Stakeholders
  - Regulatory officials
  - Business & Industry
  - Standards Committees
  - Federal Agencies
  - Laboratories

Training

- State and Industry Laboratory Metrology
- Field Officials
- Administrators

Information Dissemination

- Publications and NIST Handbooks

Representation

- GML, APLMF and other international organizations

NIST Handbooks Impact $535.4 Billion in U.S. Retail Food Sales

- With the National Conference on Weights and Measures, NIST provides the technical content for HB 44 and 133
  - NCWM then adopts
- All States adopt or use HB 44 and HB 133
- New Federal Adoptions in 2006
  - USDA adopted NIST Handbook 133, "Checking the Net Contents of Packaged Goods" for meat and poultry
  - DOC's Seafood Inspection Program now incorporates significant provisions of HB 133 and HB 44 for scales in its inspection procedures
- Result: State and Federal adoption ensure consistent national standards for verifying that contents are labeled accurately and that consumers and retailers get what they pay for
NIST and NCWM Successfully Working Together

- Technical Sector Support
- Pelletized Ice Cream Issue Resolved
  - FDA Acted Quickly
- Seafood Fraud Workshop
  - Cooperative effort to resolve a nationwide problem
- Moisture Loss Working Group
  - Tackling tough issues

Marketplace Impact

- Only about $0.50 is spent per person per year in the United States by weights and measures enforcement programs!!
- Yet, W&M regulations impact on transactions in the marketplace involve over 50% of the U.S. Gross Domestic Product
- Very few consumers are aware that W&M exists – until they have measurement problems in the marketplace or higher prices drive questions

W&M in the Marketplace

Example: Gas Pumps

- Retail petroleum sales (at gas stations only) in 2002: $250B
- Accuracy of retail motor fuel dispensers (gas pumps) heavily regulated in the U.S.
  - Permissible error: 0.5%
  - Compliance rates in the U.S. in 2002 was > 93%
- Need to balance value of presence in marketplace with compliance rate

Mexico’s 2004 survey indicates potential impact of lack of regulation:

- More than 47% compliance with less than 0.1% error.
- More than 40% failure with more than 1.05% error.

Issues Facing the Weights and Measures Infrastructure

- Revenue challenges at state and local level
  - Cuts to programs and lab closures
- Unseen importance of infrastructure leading to cuts and reduced support
- Long term impacts likely
  - Experience has shown that areas without adequate oversight tend to fail to comply with the applicable requirements

Examples of Problems

- In Israel, lack of oversight led to deviations detrimental to consumers at 75% of gas pumps

- In Mexico, lack of oversight resulted in consumers receiving as little as half of what they paid for at 90% of gas stations across the country, costing consumers at least $1 billion in one year

Future Impacts

- NIST is concerned that lack of support for weights and measures could lead to similar failures in the United States
  - Disturbing trends are appearing across the country
- Letter expressing concern sent to all governors by NIST Deputy Director
Conclusions

- Essential for NIST and NCWM to work together in these difficult times
  - Complementing each other’s work
  - Working towards securing uniformity in weights and measures

- Seeking creative ideas for supporting the whole weights and measures infrastructure
  - NIST alone doesn’t have the answers
Chairman’s Address
94th National Conference on Weights and Measures
San Antonio, Texas
July 14, 2009

Jack Kane
Montana Business Standards Division

Good morning. On behalf of NCWM, Inc., I’d like to welcome you to the 94th Annual Meeting of the National Conference on Weights and Measures.

It’s been quite a year. As a board, we wrapped up several issues and began exploring options for several new ones, all with the end result of making NCWM a stronger, more viable, and more responsive organization. As I’m sure you all know, one of our larger projects was that of transitioning from utilizing the services of a management company to assuming the responsibility of hiring our own Executive Director to manage the affairs of the Conference including meetings, membership, and the NTEP program. I am glad to report that the transition went well; actually, much better than some on the Board of Directors thought it would.

As of today, the Conference has a permanent address in Lincoln, Nebraska. Don Onwiler, a past NCWM Chairman, has contracted with NCWM to serve as Executive Director and currently has a staff of three very capable folks including another of our own, Jim Truex, who is serving as the NTEP Administrator. My thanks to them and past chairman Judy Cardin for their hard work in making the transition as seamless as it was.

While the transition was a large project and consumed quite a bit of time, it was, as I mentioned, not the only project the Board took up this year. The Board has been involved in a review and overhaul of the NCWM strategic plan. The plan we had in place was developed several years ago, and upon review, it was felt that the goals needed to be revised to reflect where we wanted to be in the future. As developed, this is not a static document, rather, I hope you will view it and use it as it was designed, as a living document rigid enough to provide direction and guidance, yet constructed to be adaptable to the changing needs of this group.

The board also is reviewing NCWM’s policies to ensure that they reflect the current needs of the organization, investigating alternative methods to increase member involvement in the standards development process, and implementing the first portion of the inspector training program. For all of their hard work, I compliment the entire Board of Directors and especially Randy Jennings the Chair-Elect for getting involved and making a difference. You are being well served by this group of folks. Which brings us to my theme for the year, “Get Involved, Make a Difference.” The weights and measures community, like many others, is experiencing change; tough economic times have resulted in all jurisdictions having to tighten their belts to some extent. For the more fortunate among us, this has simply meant making do with a little less. For others, it has meant making do with a lot less; some even face severe curtailment of their programs.

We’ve also seen changes in the way state legislatures view our participation in the regulatory process with some states’ lawmakers restricting the historical enforcement of equity issues we hold tight to, such as split weighing and privatization of Weights and Measures services. While changes such as these are difficult to deal with, in the short term, they are not insurmountable and the pendulum will swing; better times will come. Our programs will continue to be recognized for the value they have to offer. However, one change that I do not see going away is one of position longevity; when I began with weights and measures at the national level back in 1995, almost all of the various state administrators that I knew had been with weights and measures for years, often starting out as I did, packing cans and fifties and working ourselves up the ladder. While the majority of the state directors still come up through the ranks, other individuals who are recognized by their respective jurisdictions as extremely competent employees are being selected to run Weights and Measures programs in several states and jurisdictions, and, that’s a good thing. I have long been an advocate that an infusion of outside people into a managerial unit provides a fresh perspective to that unit. While competent outsiders should be a welcome addition, we also need to insure that they
are well grounded in weights and measures issues in the event they are called upon to assume a leadership position. With that said, I’d like to re-issue to all of you the challenge to get involved and make a difference by recognizing the potential leaders in your jurisdictions, your different regions, and here at the national level, mentoring them and tasking them with progressive assignments to enable them to develop the skills necessary to someday lead the Conference.

As I’ve said in the past, and I think I can speak for all past chairmen, none of us made it here by ourselves. While we all possessed a desire to succeed, there was always a Sid Colebrook looking for volunteers for a committee, a Lou Straub appointing standing committee members, or an Aves Thompson shuffling the deck. For every Sid, Lou, or Aves looking for good solid people to select, there’s a Jackie Walsh, a Kim Connor, or an Ivan Hankins who is willing to take that first step by accepting their first appointment to an NCWM committee and making a difference.

To paraphrase John Donne, as “no man is an island,” neither is an organization unto itself. The strength and validity of NCWM lies not just with its members but with its partners as well. Our partners to the north, Measurement Canada, attend both the Annual and the Interim meetings, graciously providing competent, knowledgeable folks to help staff the standing committees; an arrangement that I hope continues for a long time. Our industry members also contribute immeasurably to this Conference through the work they do both here at the meetings and also back at their corporate offices. And, believe me, after working with Chris Guay, Darrel Flocken, Steve Lankford, and Bob Murnane on the Board of Directors, these folks put in a lot of time and a lot of effort helping NCWM achieve its goals.

And, last but not least, NIST, truly our partner since inception, provides technical resources beyond simply staffing the standing committees. The good folks at NIST have always been a huge asset to the weights and measures community. From sponsoring the Conference for those many years to providing instructor training, from lab quality standards to hydrogen standards, NIST has always been a solid ally of the Conference and a staunch supporter of weights and measures issues. To all of these folks and the many others who support the Conference, I offer my sincere thank you for getting involved and making a difference.

It’s been a long year, and I feel as if we’ve accomplished quite a bit. For this I thank the Board of Directors, the standing committees, and Don Onwiler and his staff for their hard work and dedication.

For these last 15 years, weights and measures and the Conference has been a large part of my life. Thanks to all of you for the privilege and honor of serving as your Chairman.
Good Morning.

It is truly my pleasure to be standing here before the members of this organization as the person who will represent the NCWM as Chairman for the coming year. I want to thank each of you for trusting me with this responsibility. I also want to say a special “thanks” to each of the board of directors members that I have had the opportunity to work with over the past few years, and, in particular, Jack Kane and Judy Cardin, both who have served as Chairs over the past two years, and Carol Hockert, as the NCWM Executive Secretary. It has been a true learning experience working closely with this dynamic set of individuals, and without that experience I would not be nearly as prepared to assume this position at this time. Thank you, Judy, Jack, Carol, all the board members, and Don Onwiler and his staff at NCWM Headquarters.

The National Conference on Weights and Measures has made great strides both administratively and technically with standards development and revisions since I attended my first Annual Meeting in Little Rock, Arkansas in 1987. At that meeting, the most important item on the agenda for me was a proposed change in the Liquid Measuring Device (LMD) code for the tolerance values on wholesale meters. The proposal was to set a tolerance based on percent meter error. The new tolerance proposed for maintenance tests was three-tenths percent of the indicated volume. The current code was “fifty cubic inches for the first fifty gallons, and one-half cubic inch for each gallon in excess of fifty gallons.” On a one thousand gallon test draft, that was moving from about a 2.2 gallon tolerance to a 3 gallon tolerance. I considered this an unnecessary relaxation of the code and was passionately opposed to the change. However, the consensus of the voting body was that the change was appropriate and the item was adopted, so I went home still in my box, feeling like the process was flawed. Nevertheless, we implemented the revised tolerance into our inspection program, and I continued to come back in order to participate in the process, providing input where I could, and soon realized that what I had experienced at my first meeting was the nature of an organization that seeks consensus. As an individual, you don’t always get exactly what you want in a process such as ours, but at the end of the day, I do believe that in most cases, the final result is what is best for the majority of stakeholders. And I use the word “final” very loosely, as we know that our standards are continually being reviewed for possible revisions that may be appropriate in order to keep us on pace with time.

So with that, I’ll introduce my theme for the following year, “Breaking Molds to Shape the Future.” Just as I had to get out of my box after losing a campaign at my first meeting, I believe that we are at a point in time where we have to challenge ourselves as an organization to “think out of the box.” I say this in terms of administrative procedures for managing the NCWM process, in our pursuit for standards development and training materials, and in our management of the National Type Evaluation Program.

Technology available now and in the future will be affecting our organization in many ways. The newly developed strategic plan being put forth by the Board of Directors for your review and comment leans heavily on that fact. The revised plan seeks to make this organization more effective in the development of our standards and to offer a return to all of our members that represent the foundation of this organization. We are working to offer on-line testing for the emerging National Certification Program, creation of an e-library of training materials, and exploring the construction of an on-line comment system that would provide the opportunity for all 2300 NCWM members to conveniently submit their position on Conference items and upload attachments for committee review.

From an administrative standpoint, we should further investigate how we can use e-services to be more efficient in our processes and at the same time provide our members with a more convenient path to be a part of that process. We are beginning to explore how we can effectively use Web meeting software for administrative meetings and
potentially for use by the technical standing committees; hopefully, providing for a more efficient path for development of items under each committee’s jurisdiction.

Thinking out of the box is also important for our technical committees. In the course of our standards development process, it is important to be “looking around the corner” for the best emerging technology that can take us where we need to be. There may be times when we find it prudent to pass on a currently available option in favor of a long term solution with promising technology that could potentially serve us better in the future.

The Specifications and Tolerances Committee (S&T) has historically had an agenda that, due to both the number of items and scope of items, has been difficult to manage. I feel that it is time for us to begin discussing some possible alternative approaches as to how we can best deal with the volume of items that fall within the jurisdiction of the S&T Committee.

It is also our responsibility to review the structure of the National Type Evaluation Program and be willing to adapt and develop a strategic plan that ensures the long term success of this vital component of the NCWM.

These are a few examples of what I mean by “breaking molds to shape the future.” We are in the process of completing our 94th Annual Meeting. This body is steeped in tradition, yet we have shown that we are capable of change. I want us to continue to operate with an open mind and be willing to discuss new ideas that may make us an even stronger organization and possibly lead to more traditions. In order to most effectively do that, the individuals serving in leadership positions are in need of feedback and ideas from every member of this organization. I want to encourage every stakeholder in this group to come forward with your ideas or suggestion as to how the NCWM can better serve the standards development process. I will always make myself available to members, so please feel free to contact me at any time. And, I know that Don Onwiler will always take time out to talk with anyone about the National Conference on Weights and Measures, no matter what the issue may be.

So with that, I will end by announcing the following appointments:

**Board of Directors**

To the Board of Directors, to fill the At-Large Director vacancy created with the advancement of Tim Tyson as Chairman-Elect, I have recommended to the Board and all have voted affirmatively for Mark Coyne, City of Brockton, Massachusetts.

**Laws and Regulations Committee**

- Raymond Johnson, New Mexico, for a five-year term replacing Joe Gomez, New Mexico

**Specifications and Tolerances Committee**

- Paul Moyer, State of Nebraska, for a five-year term replacing Todd Lucas, Ohio

**Professional Development Committee**

- Dale Saunders, State of Virginia, for a five-year term replacing Richard Cote, New Hampshire

**Credentials Committee**

- Kevin Upschulte, State of Missouri, for a three-year term replacing Raymond Johnson, New Mexico
- Tom Geiler – Coordinator, has agreed to serve one more year

**Chaplain**

- Stephen Langford, Cardinal Scale Manufacturing Company
Parliamentarian

- Louis Straub, Fairbanks Scales, Inc.

Presiding Officers

- Doug Deiman, State of Alaska
- Tim Chesser, State of Arkansas
- Maureen Henzler, State of Kansas
- Kim Connors, Barnstable, Massachusetts

Nomination Committee

- Jack Kane, Chair
- Judy Cardin
- Dennis Ehrhart
- Ross Andersen
- Thomas Geiler
- Maxwell Gray
- Steve Malone

Sergeants-at-Arms

- Richard Tredler, Minnesota
- Kathleen Sundt, Minnesota

Again, thank you for the opportunity to serve as Chairman for this coming year.
## NCWM 2009 Annual Meeting Honor Award Recipients

**For Years of Attendance of NCWM Annual Meetings**

<table>
<thead>
<tr>
<th>Full Name</th>
<th>Organization</th>
<th>State</th>
<th>No. of Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joseph Silvestro</td>
<td>Retired Weights &amp; Measures Official</td>
<td>NJ</td>
<td>40</td>
</tr>
<tr>
<td>Robert Reinfried</td>
<td>Scale Manufacturers Association</td>
<td>FL</td>
<td>25</td>
</tr>
<tr>
<td>Mark Coyne</td>
<td>City of Brockton</td>
<td>MA</td>
<td>20</td>
</tr>
<tr>
<td>Christopher Guay</td>
<td>Procter &amp; Gamble</td>
<td>OH</td>
<td>20</td>
</tr>
<tr>
<td>Maxwell Gray</td>
<td>Florida Department of Agriculture &amp; Consumer Services</td>
<td>FL</td>
<td>20</td>
</tr>
<tr>
<td>Ronald Hayes</td>
<td>Missouri Department of Agriculture</td>
<td>MO</td>
<td>20</td>
</tr>
<tr>
<td>Richard Tucker</td>
<td>RL Tucker Consulting</td>
<td>IN</td>
<td>20</td>
</tr>
<tr>
<td>Celeste Bennett</td>
<td>Michigan Department of Agriculture</td>
<td>MI</td>
<td>15</td>
</tr>
<tr>
<td>Darrell Flocken</td>
<td>Mettler-Toledo, Inc</td>
<td>OH</td>
<td>15</td>
</tr>
<tr>
<td>Stephen Langford</td>
<td>Cardinal Scale Manufacturing</td>
<td>MO</td>
<td>15</td>
</tr>
<tr>
<td>Juana Williams</td>
<td>NIST, Weights &amp; Measures Division</td>
<td>MD</td>
<td>15</td>
</tr>
<tr>
<td>Michael Cleary</td>
<td>California Department of Food &amp; Agriculture</td>
<td>CA</td>
<td>10</td>
</tr>
<tr>
<td>Nigel Mills</td>
<td>Hobart Corporation</td>
<td>OH</td>
<td>10</td>
</tr>
<tr>
<td>Ralph Richter</td>
<td>NIST, Weights &amp; Measures Division</td>
<td>MD</td>
<td>10</td>
</tr>
<tr>
<td>Michael Sikula</td>
<td>New York Bureau of Weights &amp; Measures</td>
<td>NY</td>
<td>10</td>
</tr>
<tr>
<td>Steven Steinborn</td>
<td>Hogan &amp; Hartson, LLP</td>
<td>DC</td>
<td>10</td>
</tr>
<tr>
<td>Curtis Williams</td>
<td>Georgia Department of Agriculture</td>
<td>GA</td>
<td>10</td>
</tr>
</tbody>
</table>