

Welcoming Address National Conference on Weights and Measures

**Missoula, Montana
July 19, 2011**

**Jack Kane
Administrator, Montana Department of Labor and Industry, Business Standards Division
Helena, Montana**

Good morning and welcome to Montana.

For those of you who know me, that is something I've been wanting to say for quite some time. Since my first Conference in 1995, I have been very fortunate to have had the opportunity to attend conferences located throughout the United States; coast to coast, border to border and then some. And all along, I hoped that one year we would hold a conference in Montana so I could share my state with you, as so many of you have done when your state was chosen as the conference site.

In considering what I should address in this welcome speech, I turned to the Conference agenda and looked at the items on the agenda and wondered, "What were the issues of the day at those first Conferences held almost 100 years ago?" For that matter, "Who was Montana's representative, and, to what extent, did Weights and Measures even exist back in the "olden times" as my kids refer to anything that happened over 20 years ago?"

Pulling out my copy of the NIST CD of Weights and Measures Conferences starting in 1905, I first found reference to a Mr. A.N. Yoder, Secretary of State and Deputy Sealer for the State of Montana in the Third Conference in 1907. During those first Conferences, the protocol was for the state sealers (all fourteen or fifteen of them in attendance) to make a report to the Chairman on their states' involvement in weights and measures.

A.N., being the new guy that year, got to go first, and I'm sure he really wowed them when he started his report by stating, "Montana has so far not paid attention to the standards of weights and measures and while we have laws on the books, they are not enforced."

Well, okay, I guess if you're going to start a program, zero is as a good place to start as any!

A.N. then went on to inform the Conference that Montana had no standards and wondered how to go about getting them. Mr. L.A. Fischer, Chief Weights and Measures Division, National Bureau of Standards assured him that they would be provided. A.N. apparently a man of few words then allowed he had spoken his piece and would prefer to listen and see what he could pick up in the forthcoming discussions. A.N. didn't make it to the 1908 Conference, the Montana legislature met at the same time, and as Secretary of State, he was required to be in attendance. There was no Conference in 1909; however, he did make the 1910 Conference where he once again brought up the fact that he had no standards to work with, and in addition to a balance and mass standards, he would also like some liquid standards as he did not believe that "there is a milk bottle in the State of Montana that holds an honest quart or pint."

At this Conference A.N. was also assigned to a committee to prepare a net weight packaging bill to present to Congress. Well, that's one thing that hasn't changed in this outfit, if you speak up on some subject, sure enough; you're going to get appointed to a committee. How A.N.'s participation in this came out we don't know as he died after returning from the Conference. We do know, however, that the state did receive the standards as they currently reside in our lab in Helena.

Interesting aside, his replacement was named Swindlehorst. Reminds me of the Accounting firm of Dewey, Cheatem, and Howe.

While some things, such as committee assignments and dedication to the cause, have been in place for years, other things change. For example, in the committee report under “answers to questions,” which I assume to be the precursor to our current standing committee agendas, the topics included; bottomless measures, counter tacks, wooden dishes, testing of railroad scales, and sale of ice. In the early part of the twentieth century, ice was used as the primary refrigerant in residential households, and I can imagine that getting the ice you paid for truly was a big issue. Do you suppose that using the concept of “moisture loss” to explain why the eight-pound chunk ordered was now a three-pound piece was effective when the deliveryman was confronted by an angry housewife?

Reviewing this Conference’s agenda items shows the same type of issues, net contents and scale testing, that those early Deputy Sealers dealt with, just at a different level. For example, in 1910 one of the items on the “answers to questions” agenda was promoting a uniform rail scale test. Here we are in 2011 still talking weighing systems but now it’s time dependence and creep of load cells.

Some things have changed in Montana as well; from a population of 500 000 in A.N.’s day to almost a million today; from no program in 1910 to what I feel is a pretty darn effective program in 2011. We currently have nine field inspectors covering the entire state and specializing in all facets of inspection and testing. These nine inspectors test on an annual basis about 16 000 pumps and meters and around 7500 scales, over 500 of which are stock scales with quite a few truck, rail, and belt scales as befitting a state which produces timber, coal, cattle, and small grains. The average inspector (and ours are all above average) travels around 33 500 miles a year to get all of his inspections done. Now, I know some of you from more densely populated regions wonder what these guys do the other half of the year with only 16 000 pumps and meters. Well, when you consider that the inspection area for one inspector on the eastern border is over 50 000 square miles, perspectives change.

Holding the National Conference in Montana is a unique event and as such Tim Lloyd, the Bureau Chief, and I thought that it would be a good idea to invite the staff. At this time, I would like to introduce them and ask that they stand when their name is called out.

- Carol Larkin: Licensing technician and truly the person who makes things go so smoothly.
- Don Reimer: Inspector from Helena
- Fred Steinbacher: Inspector from Billings
- Rick Czech: Inspector from Great Falls
- Randy Griswold: Inspector from Kallispel
- Tim Stephens: Inspector from the Three Forks area
- Mike Kuntz: Inspector from Billings
- Randy Jones: Inspector from south of here in the Hamilton area

Additionally, I’d like to introduce a former inspector who is in attendance, Al Page from Billings. All of these folks are intimately knowledgeable about their areas and other parts of Montana; so, if you have any questions about things to see, or places to go, they would be a good source of information.

I know a lot of you have already taken some side trips around Missoula, up to Glacier, etc., and I sure hope you all take advantage of this location to get out and see some of Montana before you go home.

With getting out in mind, I’d like to offer a few suggestions when hiking in bear country. Take a friend or two, if you get in a jam, it’s always nice to have someone along who can help out. Wear appropriate footwear. Forget about your big, waterproof, deep lugged heavy hiking boots. Think running shoes. When the bear is charging at you and your buddies, you need to move. I know, I know, you can’t outrun a bear, but you don’t have to as long as you can out run your ex-friends!

Again, welcome to Montana. Welcome to my home.

President's Address National Conference on Weights and Measures

**Missoula, Montana
July 19, 2011**

**Dr. Charles H. Romine
Acting Associate Director for Laboratory Programs/Principal Deputy, NIST**

- Welcome and thank you for having me.
- I would like to personally thank the NCWM Chairman, Tim Tyson, the Executive Director, Don Onwiler, and the Chair elect, Kurt Floren.
- Also, thanks to those of you from Montana for hosting this meeting.
- My first exposure to weights and measures came at an early age when my mother began selling milk paint in the 1950s.
- For those of you who may have never heard of milk paint, it is, as its name suggests, a kind of paint that is made with milk, as well as lime and earth pigments, such as crushed rock or clay .
- Having been in use for more than 20,000 years, milk paint is the oldest paint known (cave paintings and Tutankhamen's tomb and the objects therein were painted with milk paint).
- My mother got a call from a weights and measures official who came out to calibrate the antique scale that she was using to measure her milk paint, which she sold by weight.
- The official checked the scale using standard weights, tinkered with it for a bit, and certified it as accurate.
- From then on, my mother could assure her customers that she was not shortchanging them, and she could assure herself that she wasn't giving away her product.
- This story illustrates the fact that both consumers and businesses benefit from accurate, uniform weights and measures.
- Weights and measures are essential for fair commerce and securing uniformity in weights and measures laws and application is a core mission of NIST.
- Ensuring uniformity of weights and measures in the United States is of course one of the primary reasons NIST was founded in the first place.
- As you are no doubt aware, the weights and measures regulatory system suffers from a visibility problem.
 - So long as you are doing your job well, no one notices, and public support wanes.
 - Waning public support leads to cuts in funding.
 - Cuts in funding leads to lack of enforcement.
 - Lack of enforcement leads to degradation of uniformity at best, and thumbs on the scale at worst.
 - Eventually, this is discovered, funding follows public outcry, you do your jobs well, everyone forgets again, and the cycle repeats.
- NIST knows this all too well, as we have a mission that few understand or appreciate until something goes wrong.
- I am here, in part, to reconfirm our unwavering support of your work.
- We cannot give you money to run your program, but we can work with the NCWM to help you devise methods for measuring the impact of your work. We commit to providing the training and technical expertise you need, and to delivering it by the means and methods that are most useful to you.
- We applaud NCWM on the development of its new certification program.
- Such credentialing only serves to bolster the professionalism of weights and measures enforcement.

- We at NIST are devoting increased attention to our training program, and we believe the link between training and certification is critical to the success of either.
- Great opportunity between our organizations exists to further the missions of both.
- And, we fully support NCWM on the recent decision to take over the responsibility for putting out Publications 15 and 16.
 - The successful transition of publication responsibility will be a result of the cooperative relationship that we have been building.
 - NCWM's assumption of this responsibility will also give us at NIST more time to do the things that we do best: providing technical expertise and advice, training, and developing an ever expanding and accessible set of resources i.e., workshops, webinars, and other online training.
- Our recent reorganization served to put NIST back on a mission-focused footing.
- Naturally, this means that weights and measures has risen to a place of prominence within the organization, and rightfully so.
- In this time of tumultuous technological change, we must remember that weights and measures is not merely about maintaining uniformity, but about keeping things the same.
 - New technologies present us with a host of new challenges; device specifications, methods of sale of new products, maintaining and increasing needed skills.
 - The setting of the regulations debated on the floor of this Conference provides order and empowers consumers to make value comparisons.
 - For instance, at long last the electric car is a reality.
 - Charging stations are appearing on our streets and before too long they will likely be as common as parking meters. In fact, those two technologies may very well merge at some point.
 - But before that can happen, we have to decide how the electricity will be metered and sold
 - Here, the efforts of NCWM, NIST, state weights and measures officials, and industry to come to a consensus that serves the interests of all is vital.
- Likewise, so much commerce today relies on technologies that are hidden.
 - The gas pumps of yesterday were mechanical, they had mechanical flow meters that could be checked for accuracy quite easily.
 - The gas pumps of today are complicated computerized devices that perform dozens of functions from the dispensation of gas to the dispensation of free car washes.
 - Computerized control, of course, depends on software.
 - How do we ensure that the software is working properly and that it hasn't been tampered with or programmed to overcharge, say, every third customer?

We need new tools, new capabilities to cope with this onslaught of change if we are to maintain consumer confidence and prove true the boast that America is the best place in the world to do business.

- Thank you for having me.
- Questions from the audience?
- Happy to talk with individuals during breaks, etc.

Chairman's Address
96th National Conference on Weights and Measures

Missoula, Montana
July 19, 2011

Mr. Tim Tyson
Director of Weights and Measures, Kansas Department of Agriculture
Topeka, Kansas

I hope everyone has been able to get out and see some of the beautiful sites around Missoula. Sunday evening my wife and niece talked me into hiking up the hill to the M. I don't think what I did was considered hiking. I made it, and next week I may need by-pass surgery. I know Tim Chesser saw more sites than he wanted. Tim was able to safely elude a grizzly in Glacier Park. I have tried to find the YouTube video of Tim running from the bear, but haven't found it yet; I even tried searching on "Arkansas Redneck mauls bear in Glacier Park." If we find it, we will show it. On a serious note, we are thankful Tim survived.

In the last newsletter, I talked about Weights and Measures being the silent third partner in every transaction. Everyday our inspectors go out and test scales and gas pumps; they test packages and do price verifications. They also may test propane meters, DEF dispensers, and mass flow meters that are measuring ag chemicals at the local co-op or they may be at pipeline testing meters. Whatever they are testing, our inspectors are ensuring that when a transaction occurs, the consumer and the device owner are both being treated equitably. Most of the time, no one notices.

Also, in the article, I wrote about the need to acquire and assemble data to show the impact we have on the marketplace when we can perform our duties and when we cannot. Do we have this data? No. I can tell you that when the State of Kansas started testing VTM's after a three-year layoff, that compliance rates were less than 50 %, and now, after two years they are at 90 % compliance. As an organization, we need to compile these instances and put dollar amounts to them.

I would like to share some analysis that I have done. In Kansas, we produce about 224.4 million bushels of sorghum, 369.6 million bushels of wheat, 595.3 million bushels of corn, and 160.6 million bushels of soybeans. At current, cash grain prices are \$6.50 for sorghum, \$7 for wheat, \$7 for corn, and \$13.75 for soybeans; Kansas produces \$10.4 billion worth of grain. That is just in those four grains. Now let's assume that our analysis shows that after testing all of our grain scales that on a bell curve our median error is zero. If we change that bell curve and now our median is a -20 pounds, one division, we now have just reduced our economic value by \$4.18 million dollars. That is \$4.18 million dollars less that our producers don't get paid for.

Now let's look at fuel sales. Kansas sells about 3.3 billion gallons of fuel each year. If we again look at our bell curve of errors and our average error is zero, that 3.3 billion gallons is worth \$11.5 billion at \$3.50 per gallon. I have looked at our bell curve and it does indeed have a median of zero. Now, if we again shift that bell curve to the left and now have a - 1 cubic inch median error then consumers just lost \$10 million. In your state, that could be less or more depending on fuel prices and the amount of gallons sold.

These are the types of numbers that get people's attention. However, we have to be able to say what our bell curves are, and how they are impacted by inspection or how they are impacted by no inspections.

Every day we hear how the economy is getting better or not. The reality is that we all are struggling with budget cuts and reduced revenues. As states, we must find new ways of doing business and better ways of justifying our programs.

I cannot tell you when we will have better analysis for our programs; I can only tell you we must. I can tell you that it has been a humbling experience being your chairman over the past year; I thank you.

I now would like to call up Alan Johnston, President of Measurement Canada, for the signing of the Mutual Recognition Agreement (MRA) between our two Nations.

New Chairman's Address **96th National Conference on Weights and Measures**

Missoula, Montana
July 21, 2011

Mr. Kurt Floren
Commissioner, Los Angeles County Department of Agriculture
Los Angeles, California

It is truly my honor to be entrusted with the role of Chairman of the National Conference on Weights and Measures. I'll admit, those words sound a bit odd to me as, with amazement, I think back twenty-six years, to 1985, when I first entered the field of weights and measures regulation as a new inspector, quickly finding that I did not have a clue of the vast array of issues that this work encompasses. I knew that gas pumps and grocery scales were regularly tested, but as fuel quality standards, scanner accuracy, package inspection, weighmaster enforcement, and all the, then, "new technology" of load cells and interfaced software programs came into view, I began to realize the immense diversity of this field and came to recognize the fact that weights and measures issues touch every consumer dozens, perhaps hundreds of times each day.

Since then, I have been blessed with opportunities to experience a broad array of weights and measures activities, from all manner of device, package, and label inspections to involvement in many major investigations involving overcharges through price scanners, multi-million dollar cases regarding underweight packaged goods, investigation of gas station operators defrauding consumers through electronic manipulation of fuel dispensers, and a host of other matters. My fascination with what we do has only grown.

Through my early years, as a field inspector and, later, as a young supervisor, I would receive my new Handbooks 44, 130, and 133, reading all of the amendments and, at times, wondering, "Who are the idiots who came up with this?" I attended my first NCWM meeting in 1994 in San Diego, catching my first glimpse of the incredible detail that was debated, the opposing views and opinions that were offered, and the dedication and passion of the stakeholders involved. That meeting quickly changed my opinions regarding any involvement of "idiocy" and opened my eyes to the many factors and considerations that go into developing such standards.

We here, engaged in the work of the Conference and in our duties and activities back home, readily recognize the importance of what we do. That's what keeps us involved, keeps us striving to meet our motto, "That Equity May Prevail." As a national standard-setting body, the work and focus of NCWM has undergone incredible changes and addressed an ever-widening array of challenges. We have continually stepped up to meet those challenges.

As we have all witnessed in these challenging times, many are facing cutbacks, reductions, hiring freezes, and the like. Again, all of us here fully recognize the importance of what we do. It is evidenced by the fact that we are at this Conference, have struggled to justify the expense, to take the time from the workloads that await us back at our offices, to study the issues and present our views. However, neither the public nor our state or local government leaders know enough of what we do, why we do it, and why it is so critical to the marketplaces, the consumers, and the competing businesses and manufacturers that we devote ourselves to protecting.

With that realization, the theme I have chosen for the coming year is: "Taking Measure of Our Worth."

This Conference has tackled so many issues through just the years that I have witnessed:

- As fuel dispensers and scales evolved from mechanical to electronic systems, security seals evolved from lead and wire devices to audit trails....
 - Yet, how many have the time and resources to regularly access and review audit trails?

- As price scanners grew in use, we developed the Examination Procedure for Price Verification...
 - But, how many jurisdictions have funding to routinely perform scanner inspections?
- We've developed standards and test procedures for Multiple Dimension Measuring Devices...
 - But, how many have been able to secure the funds to acquire test standards?
- We've continually revised Handbook 133 and remain struggling to address moisture loss...
 - Yet, how many jurisdictions daily, weekly, or monthly conduct package inspections?
- Now, we are witnessing the introduction of hydrogen fuel to the marketplace and have adopted a tentative code for testing dispensers with calibrated transfer standards...
 - How many will have resources to acquire the test equipment?...To absorb the workload?
- NCWM recently adopted revisions to tolerances and test procedures for water sub-meters. As I stand here, in spite of strong efforts to defeat it, a bill is steadily proceeding through California's Legislature to exempt water sub-meters from inspection by weights and measures officials.
 - One of the principal claims and arguments of the proponents, "Manufacturers do not face such regulation in most, if any, of the other 49 states."

In many cases, resource limitations and resulting forced prioritization of only select duties prevent many of us from undertaking these and other regulatory activities.

This body does great work, important work, and has done so for over 100 years. Together with our associate members, industry partners, and many stakeholders, we work diligently and passionately to develop appropriate, meaningful, effective standards and procedures for the benefit of all in the marketplace. But, if we don't have the resources to implement those procedures, to enforce the standards, and to monitor compliance in the marketplace, all the standards in the world have little meaning and limited impact. We need to do a better job in explaining our worth and that of the work we do.

All of us are pressed for time. No one wants more surveys to complete or data to process and report. But, as we address more emerging technologies, develop more and more standards, adopt ever more detailed procedures, we need to work together to ensure that we can carry them out, apply and enforce them in the field, and ensure the very uniformity that is NCWM's goal.

We need to tell our story – demonstrate the need – arm our legislators with the understanding and ammunition to go to battle for us, and secure the resources to sustain and enhance our work. We debate for hours over why certain requirements, tests, and standards are critical. But, few outside of those debates and discussions ever hear or ever have cause to know why it's all so important.

As regulatory officials, manufacturers, and retailers, our members measure a lot of commodities. We concern ourselves with how those commodities are marketed, ensuring accuracy in measurement and in providing sufficient information to facilitate value comparison.

The services that we provide to consumers, businesses, and device manufacturers, alike, are commodities...that must be marketed... that have a cost...that deserve to be invested in.

"That Equity May Prevail".... It is not prevailing in state budgets. It is not prevailing in the minds of our elected leaders. In this economy, it certainly should be prevailing in the minds of consumers and business operators. We need to provide the information for value comparison – comparing our value to that of our states' health service programs, law enforcement services; all the competing interests – to be in the minds of the key decision makers whose assistance and support we need in enhancing our programs. I look forward to working together and seeking your assistance in taking measure of our worth and advertising why we are worth investing in.

I hope that, as your Chairman, over the next year, I can help in coordinating efforts to market ourselves, to tell our story, to compile the best of what many of you may have already developed, and to seek additional information to advertise our worth and that of our programs to the marketplace we serve and protect. "Taking Measure of Our Worth:" Let's work together!

In the spirit of working together, let's acknowledge all those who have taken an active role in serving on the many committees, task forces, and work groups to accomplish the goals of this Conference. To all of you, thank you.

In moving forward, I have a number of appointments to make, with acknowledgment that some additional appointments have yet to be finalized, and I will be making those announcements soon.

Laws and Regulations Committee:

- To Be Later Announced: One appointment for a one-year term.
- Replacing John Gaccione, who has been appointed to the Board of Directors is Richard Lewis, Georgia, five-year term.

Specifications and Tolerances Committee:

- To Be Later Announced, five-year term.

Professional Development Committee:

- Kristin Macey, California, five-year term.

Nominating Committee:

- Chair, Tim Tyson, Kansas
- Judy Cardin, Wisconsin
- Charles Carroll, Massachusetts
- Thomas Geiler, Barnstable Regulatory Services, Massachusetts
- Joe Gomez, New Mexico
- Maxwell Gray, Florida
- Randy Jennings, Tennessee

Credentials Committee:

- To Be Later Announced

Presiding Officers:

- Mike Boitano, Amador County, California
- To Be Later Announced, three additional appointments

Parliamentarian:

- Lou Straub, Fairbanks Scales, Inc.

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Chaplain:

- Stephen Langford, Cardinal Scale Manufacturing Company

Sergeants-At-Arms:

- I will be working with our host for the 2012 Annual to designate Sergeants-At-Arms.

Again, it is truly my honor and privilege to serve as your NCWM Chairman this year. I look forward to working with Chairman-Elect, Stephen Benjamin and all of you in continuing promoting and measuring the value of the important work of the National Conference on Weights and Measures.

NCWM 2011 Annual Meeting Honor Award Recipients

2011 Lifetime Achievement Award:

- **Steven Malone**, Retired, Nebraska Weights and Measures Division

2011 Distinguished Service Award:

- **Ross Andersen**, Retired Administrator, New York Bureau of Weights and Measures
- **Bill Braun**, Retired Consultant, formerly Procter and Gamble
- **Judith Cardin**, Chief, Wisconsin Weights and Measures
- **Tom Geiler**, Director of Regulatory Services, Barnstable Weights and Measures, Barnstable, Massachusetts
- **Darrell Flocken**, Manager of Compliance Services, Mettler Toledo
- **Max Gray**, Chief, Florida Bureau of Weights and Measures
- **Robert Murnane**, President, Seraphin Test Measure
- **Henry Oppermann**, Weights and Measures Consulting, LLC, formerly NIST
- **Thomas Stabler**, Retired, Stabler Training Services, formerly NIST
- **Gilles Vinet**, Vice President of Program Development, Measurement Canada

2011 Contributions Award:

- **Jonelle Brent**, Bureau Chief, Illinois Weights and Measures
- **Vicky Dempsey**, Chief Inspector, Montgomery County, Ohio
- **Doug Hutchinson**, Senior Program Officer, Program Development Directorate at Measurement Canada
- **Kristin Macey**, Director, California Measurement Standards Division

Attendance Recognition:

Full Name	Organization	State	No. of Years
Tom Bloemer	Department of Agriculture	KY	5
Tim Chesser	Bureau of Standards	AR	5
Douglas Deiman	Division of Measurement Standards/CVE	AK	5
James Hewston	Scale Source	NE	5
Yefim Katselnik	Dresser Wayne	TX	5
David Rajala	Total Meter Services, Inc.	PA	5
Dale Saunders	Department of Agriculture and Consumer Services	VA	5
John L. Sullivan	Department of Agriculture and Commerce	MS	5
Elizabeth Tansing	Food Marketing Institute	VA	5

Full Name	Organization	State	No. of Years
Lisa Warfield	NIST Weights and Measures Division	MD	5
Loretta Carey	U.S. Food and Drug Administration	MD	10
Steven Grabski	Wal-Mart Stores, Inc.	AR	10
Jeff Humphreys	Los Angeles Department of Agriculture	CA	10
Paul A. Lewis, Sr.	Rice Lake Weighing Systems	WI	10
Terence McBride	Memphis Weights and Measures	TN	10
Steven Cook	NIST Weights and Measures Division	MD	15
William Cooper	Tuthill Transfer Systems	IN	15
Jack Kane	Department of Labor and Industry Business Standards	MT	15
Lawrence Stump	Indiana State Department of Health	IN	15
Tina Butcher	NIST Weights and Measures Division	MD	20
Gilles Vinet	Measurement Canada	ON	20
Charles Carroll	Division of Standards	MA	30