N C W M PUBLICATION

16

COMMITTEE REPORTS FOR THE 102ND ANNUAL MEETING

Pittsburgh, Pennsylvania / July 16-20, 2017

Prepared in Cooperation with the National Conference on Weights and Measures, National Type Evaluation Program, National Institute of Standards and Technology Office of Weights and Measures, Central Weights and Measures Association, Northeastern Weights and Measures Association, Southern Weights and Measures Association and Western Weights and Measures Association





National Institute of
Standards and Technology
U.S. Department of Commerce









National Conference on Weights and Measures Overview

National Conference on Weights and Measures (NCWM), Inc. is a standards development organization for weights and measures regulatory agencies of the states, counties, and cities of the United States, as well as for federal agency use. The Annual Meeting brings together government officials and representatives of business, industry, trade associations, and consumer organizations for the purpose of hearing and discussing subjects that relate to the field of weights and measures technology and administration.

The programs of NCWM and its committees explore the broad area of this economically important segment of governmental regulatory service. NCWM develops and recommends laws and regulations, technical codes for weighing and measuring devices used in commerce, test methods, enforcement procedures, and administrative guidelines for adoption by regulatory agencies in the interest of promoting uniformity of requirements and methods among state and local jurisdictions.

A major objective of NCWM is to foster understanding and cooperation among weights and measures officials and all industrial, business, and consumer interests. NCWM has been cited on numerous occasions for its outstanding success. The National Institute of Standards and Technology (NIST) have statutory responsibility for "cooperation with the states in securing uniformity of weights and measures laws and methods of inspection." Opinions expressed in submitted documents are those of the authors and not necessarily those of NCWM. Contributors are solely responsible for the content and quality of their material.

Tradition and Technology Drive U.S. Standards for Trade

Kristin Macey, Chairman California



Welcome back to Pennsylvania! Just two short years ago, the National Conference on Weights and Measures held its 100th Annual Meeting in Philadelphia. This time we're visiting the other side of the state, in Pittsburgh, for our 102nd meeting July 16 - 20, 2017!

Pittsburgh, founded in 1758, will forever be associated with steelmaking, but its heavy industry days are largely gone. The "Steel City" today is a hub for a variety of next gen industries like robotics, bio-tech, computer science, and health care. Pittsburgh is also nicknamed the "City of Bridges" due to its location at the confluence of the Allegheny, Ohio, and Monongahela rivers; 446 bridges to be exact.

The Annual Meeting will be at the Omni William Penn Hotel, a historic downtown hotel built in 1916 and recently renovated. It has been host to movie stars, politicians, heads of state and leaders in business and industry. Our Wednesday evening special event will be at the Carnegie Science Center where dinner will be served and attendees will have access to 3 floors of exhibits.

I encourage you to include some extra time so you can see first-hand why Pittsburgh is routinely picked by *Forbes* and others as a top city in the U.S. to live or visit. Take in a baseball game at PNC Park to watch the Pirates take on the Cardinals or Brewers, or try some of the city's favorite foods like pierogis or a Primanti Brothers sandwich. While you're out visiting the sights, you might get lucky and ride in one of the self-driving cars used for transportation services throughout the city.

Your attendance and participation at this and other NCWM meetings are essential ingredients to the successful adoption of national weights and measures standards in the U.S., and I thank you in advance for your contributions to this all-important process.

See you soon in "The 'Burgh"!

Krishing Many

Sincerely,

Kristin Macey

NCWM Chairman

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Schedule of Events

(The schedule of events is tentative and subject to change.)

*Committee hearings will occur in the order presented below. Times of each hearing are not firm; when one committee finishes, the next committee will begin. Committee chairs reserve the right to group items and select their sequence for presentation on voting. There will be no break between committee reports; registrants should plan to attend an entire Voting Session to ensure their presence when items of interest are likely to be under consideration.

Saturday, July 15, 2017		
8:30 a.m. – 5:00 p.m.	NCWM Board of Directors Meeting	Allegheny
Sunday, July 19, 2015		
7:30 a.m. – 9:00 a.m.	Coffee Service	Prefunction on 17 th Floor
7:30 a.m. – 5:00 p.m.	Registration and Exhibits	Prefunction on 17 th Floor
8:00 a.m. – 11:30 a.m.	Meter Manufacturers Association	Urban
9:00 a.m. – 11:30 a.m.	Board of Directors	Allegheny
9:00 a.m. – 11:30 a.m.	Weigh-in-Motion Task Group	Sky Room
9:00 a.m. – 11:30 a.m.	Charter Team	Phipps (Conference Floor)
11:30 a.m. – 1:00 p.m.	Lunch on Your Own	
1:00 p.m. – 3:30 p.m.	Packaging and Labeling Subcommittee	Urban
1:00 p.m. – 3:30 p.m.	Safety Task Group	Franklin/Greene
1:00 p.m. – 3:30 p.m.	Fuels and Lubricants Subcommittee	Monongahela
3:30 p.m. – 4:00 p.m.	Joint Committee Meeting	Grand Ballroom
4:00 p.m. – 5:00 p.m.	Agenda Review	
	Professional Development Committee	Franklin/Greene
	Specifications and Tolerances Committee	Monongahela
	Laws and Regulations Committee	Urban
	NTEP Committee	Allegheny
	Board of Directors	Allegheny
5:30 p.m. – 7:00 p.m.	Chairman's Reception	Hope Room

Monday, July 17, 2017		
7:00 a.m. – 9:00 a.m.	Light Breakfast	Prefunction on 17th Floor
7:00 a.m. – 5:00 p.m.	Registration and Exhibits	Prefunction on 17 th Floor
8:00 a.m. – 8:30 a.m.	New Attendee Orientation	Grand Ballroom
	Mr. Chris Guay, Procter and Gamble	
8:30 a.m. – 5:00 p.m.	Official Session – Open Hearings Presiding Officer	Grand Ballroom
	Mr. Loren Minnich, Kansas	
	Professional Development Committee	
	Specifications and Tolerances Committee	
	Laws and Regulations Committee	
	NTEP Committee	
	Board of Directors	
12:00 p.m. – 1:30 p.m.	Lunch on Your Own	
1:30 p.m. – 5:00 p.m.	Official Session – Open Hearings Continued	Grand Ballroom
1:30 p.m. – 5:00 p.m.	Committee Work Sessions (To be announced)	
	Professional Development Committee	Franklin/Greene
	Specifications and Tolerances Committee	Monongahela
	Laws and Regulations Committee	Urban
	NTEP Committee	Allegheny
	Board of Directors	Allegheny

Tuesday, July 21, 2015		
7:00 a.m. – 9:00 a.m.	Light Breakfast	Prefunction on 17th Floor
7:00 a.m. – 5:00 p.m.	Registration and Exhibits	Prefunction on 17th Floor
8:00 a.m. – 9:45 a.m.	Official Session - Open Hearings (continued as necessary)	Grand Ballroom
	Presiding Officer Mr. Jack Walsh, Town of Wellesley, Massachusetts	
9:45 a.m. – 10:00 a.m.	Break	
10:00 a.m. – 12:00 p.m.	General Session	
1	Pledge of Allegiance and Invocation	
	Chaplain Mr. Constantine Cotsoradis, Flint Hills Resources	
	Welcome Address	
	Secretary Russell Redding Pennsylvania Department of Agriculture	
	President's Address	
	Dr. Kent Rochford Acting NIST Director	
	Chairman's Address	
	Chairman Ms. Kristin Macey, California	
	Awards Ceremony	
12:00 p.m. – 1:30 p.m.	Lunch on Your Own	
1:30 p.m. – 4:45 p.m.	Technical Sessions	Grand Ballroom
	Presiding Officer Mr. Jack Walsh, Town of Wellesley, Massachusetts	
1:30 p.m. – 2:30 p.m.	"The Life Cycle of Petroleum from Well to Retail"	
	Mr. Prentiss Searles, API	
2:30 p.m. – 2:45 p.m.	Break	
2:45 p.m. – 3:45 p.m.	"Planning and Coordinating a National Market Place Survey"	
	Ms. Rachelle Miller, Wisconsin	
1.00	a	
1:30 p.m. – 5:00 p.m.	Committee Work Sessions	
	Professional Development Committee	Franklin/Greene
	Specifications and Tolerances Committee	Monongahela
	Laws and Regulations Committee	Urban
	Board of Directors / NTEP Committee	Allegheny
5:00 p.m. – 6:00 p.m.	Associate Membership Committee	Grand Ballroom

8:00 p.m.	Addendum Sheets Available	Prefunction on 17th Floor
Wednesday, July 19, 20	017	
7:00 a.m. – 9:00 a.m.	Light Breakfast	Prefunction on 17th Floor
7:00 a.m. – 3:30 p.m.	Registration and Exhibits	Prefunction on 17 th Floor
9:00 a.m. – 12:00 p.m.	Regional Association Meetings	
	Central Weights and Measures Association	Allegheny
	Northeastern Weights and Measures Association	Urban
	Southern Weights and Measures Association	Franklin/Greene
	Western Weights and Measures Association	Monongahela
12:00 p.m. – 1:00 p.m.	Lunch on Your Own	
1:00 p.m. – 4:30 p.m.	Voting Session Presiding Officer Mr. Tim Chesser, Arkansas Parliamentarian Mr. Louis Straub, Fairbanks Scale, Inc. Professional Development Committee	Grand Ballroom
	Specifications and Tolerances Committee	
	Laws and Regulations Committee	
5:00 p.m. – 8:30 p.m.	Special Event: Carnegie Science Center	
	Please join us for this for an evening at Carnegie Science Center where we will enjoy dinner and exclusive access to	
	exhibits on 3 levels of the center.	
Thursday, July 20, 201	exhibits on 3 levels of the center. *Meet in hotel lobby at 5:00 p.m. to load buses.	
Thursday, July 20, 201 7:00 a.m. – 9:00 a.m.	exhibits on 3 levels of the center. *Meet in hotel lobby at 5:00 p.m. to load buses.	Prefunction on 17 th Floor
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7:00 a.m. – 9:00 a.m.	exhibits on 3 levels of the center. *Meet in hotel lobby at 5:00 p.m. to load buses. 7 Light Breakfast	
7:00 a.m. – 9:00 a.m. 7:00 a.m. – 10:00 a.m.	exhibits on 3 levels of the center. *Meet in hotel lobby at 5:00 p.m. to load buses. 7 Light Breakfast Registration and Exhibits Voting Session Continued Presiding Officer Mr. Marc Paquette, Vermont Parliamentarian Mr. Louis Straub, Fairbanks Scale, Inc. NTEP Committee Board of Directors	Prefunction on 17 th Floor
7:00 a.m. – 9:00 a.m. 7:00 a.m. – 10:00 a.m.	exhibits on 3 levels of the center. *Meet in hotel lobby at 5:00 p.m. to load buses. 7 Light Breakfast Registration and Exhibits Voting Session Continued Presiding Officer Mr. Marc Paquette, Vermont Parliamentarian Mr. Louis Straub, Fairbanks Scale, Inc. NTEP Committee Board of Directors Nominating Committee	Prefunction on 17 th Floor Grand Ballroom

Office	Name	Affiliation	Term Ends
Chairman	Kristin Macey	California	2017
Chairman-Elect	James Cassidy	City of Cambridge, Massachusetts	2017
Immediate Past Chair	Jerry Buendel	Washington	2017
Treasurer	Raymond Johnson	New Mexico	2017
Active Membership - Western	Brett Gurney	Utah	2017
Active Membership - Southern	Kenneth Ramsburg	Maryland	2018
Active Membership - Northeastern	Steve Giguere	Maine	2019
Active Membership - Central	Craig VanBuren	Michigan	2020
At-Large	Chuck Corr	Archer Daniels Midland Company	2018
At-Large	Julie Quinn	Minnesota	2021
Associate Membership	Christopher Guay	Procter and Gamble, Co.	2019
Honorary NCWM President	Dr. Kent Rochford	Acting NIST Director	NA
Executive Director	Don Onwiler	NCWM	NA
Executive Secretary	Dr. Douglas Olson	NIST, Office of Weights and Measures	NA
NTEP Administrator	Jim Truex	NCWM	NA
Measurement Canada Advisor	Carl Cotton	Measurement Canada	NA
National Type Evaluation Program Cor	nmittee (NTEP)		
Office	Name	Affiliation	Term Ends
Committee Chair	Jerry Buendel	Washington	2017
Member	Kristin Macey	California	2018
Member	Kenneth Ramsburg	Maryland	2018
Member	James Cassidy	Massachusetts	2019
Member	Craig VanBuren	Michigan	2020
NTEP Administrator	Jim Truex	NCWM	NA
Finance Committee			
Office	Name	Affiliation	Term Ends
Committee Chair	James Cassidy	City of Cambridge, Massachusetts	2017
Nominated Chair-Elect	Brett Gurney	Utah	2017
Member	Raymond Johnson	New Mexico	2017
Member	Christopher Guay	Procter and Gamble, Co.	2017
Executive Director	Don Onwiler	NCWM	NA

Office	Name	Affiliation	Term Ends
Committee Chair	Ethan Bogren	Westchester County, New York	2020
Member	Louis Sakin	Towns of Hopkinton/Northbridge, Massachusetts	2017
Member	John Albert	Missouri	2018
Member	Michelle Wilson	Arizona	2019
Member	Hal Prince	Florida	2021
Associate Membership Representative	Rebecca Richardson	MARC – IV Consulting	2018
Canadian Technical Advisor	Lance Robertson	Measurement Canada	NA
NIST Technical Advisor	David Sefcik	NIST, Office of Weights and Measures	NA
NIST Technical Advisor	Lisa Warfield	NIST, Office of Weights and Measures	NA
Professional Development Committee (F	PDC)		
Office	Name	Affiliation	Term Ends
Committee Chair	Stacy Carlsen	Marin County, California	2017
Member	Lori Jacobson	South Dakota	2018
Member	Gene Robertson	Mississippi	2019
Member	Cheryl Ayer	New Hampshire	2020
Member	Marco Mares	San Diego County, California	2021
Associate Membership Representative	Richard Shipman	Rice Lake Weighing Systems, Inc.	2018
Safety Liaison	Julie Quinn	Minnesota	NA
NIST Liaison	Tina Butcher	NIST, Office of Weights and Measures	NA
Certification Coordinator	Ross Andersen	Retired	NA
Specifications and Tolerances Committee	ee (S&T)		
Office	Name	Affiliation	Term Ends
Committee Chair	Matthew Curran	Florida	2018
Member	Jane Zulkiewicz	Town of Barnstable, Massachusetts	2017
Member	Ivan Hankins	lowa	2019
Member	Rachelle Miller	Wisconsin	2020
Member	Josh Nelson	Oregon	2021
Canadian Technical Advisor	Luciano Burtini	Measurement Canada	NA
NIST Technical Advisor	TBD	NIST, Office of Weights and Measures	NA
NIST Technical Advisor	Rick Harshman	NIST, Office of Weights and Measures	NA
NTEP Technical Advisor	Darrell Flocken	NCWM	NA

Name in a line of Comments			
Nominating Committee Office	Name	Affiliation	Term Ends
Committee Chair	Jerry Buendel	Washington	2017
Member Shall	John Gaccione	Westchester County, New York	2017
Member	Stephen Benjamin	North Carolina	2017
Member	Kurt Floren	Los Angeles County, California	2017
Member	Joe Gomez	New Mexico	2017
Member	Charles Carroll	Massachusetts	2017
	Chanes Canon	Wasachasetts	2017
Credentials Committee			
Office	Name	Affiliation	Term Ends
Committee Chair	Matt Maiten	Santa Barbara County, California	2017
Member	Lori Jacobson	South Dakota	2018
Member	Elaine Vieira	Massachusetts	2019
Coordinator	Darrell Flocken	NCWM	NA
Appointive Officials			
Office	Name	Affiliation	Office
Chaplain	Constantine Cotsoradis	Flint Hills Resources	2017
Parliamentarian	Louis Straub	Fairbanks Scale, Inc.	2017
Presiding Officer	Tim Chesser	Arkansas	2017
Presiding Officer	Loren Minnich	Kansas	2017
Presiding Officer	Marc Paquette	Vermont	2017
Presiding Officer	Jack Walsh	Town of Wellesley, Massachusetts	2017
Sergeant-at-Arms	Chris Brenner	Pennsylvania	2017
Sergeant-at-Arms	Ron Pierce	Pennsylvania	2017
Associate Membership Co	ommittee		
Office	Name	Affiliation	Office
Committee Chair	Richard Shipman	Rice Lake Weighing Systems, Inc.	2017
Vice-Chair	Bill Callaway	Crompco	2017
Secretary / Treasurer	Mark Flint	ADM	2017
Member	David Calix	NCR Corporation	2018
Member	Bill Callaway	Crompco	2018
Member	Robert Murnane, Jr.	Seraphin Test Measure	2018
Member	Richard Shipman	Rice Lake Weighing Systems, Inc.	2020
Member	Christopher Guay	Procter and Gamble, Co.	2020
Member	Mark Flint	ADM	2020
Member	Rebecca Richardson	MARC – IV Consulting	2020
Member	Prentiss Searles	American Petroleum Institute	2022
Member	Bob Wiese	Northwest Tank and Environmental Services	2022

Fuels and Lubricants Subcommittee		
Office	Name	Affiliation
Committee Chair	Matthew Curran	Florida
Vice-Chair	Ronald Hayes	Missouri
Vice-Chair	Randy Jennings	Tennessee
Secretary	Kevin Ferrick	American Petroleum Institute
Vice-Secretary	Rebecca Richardson	MARC – IV Consulting
NIST Technical Advisor	David Sefcik	NIST, Office of Weights and Measures
NIST Technical Advisor	Lisa Warfield	NIST, Office of Weights and Measures
Advisory Member	Curtis Williams	Retired
Public Sector Member	Mahesh Albuquerque	Colorado
Public Sector Member	Stephen Benjamin	North Carolina
Public Sector Member	Tim Elliot	Washington
Public Sector Member	Kristin Macey	California
Public Sector Member	Doug Rathbun	Illinois
Public Sector Member	Bill Striejewske	Nevada
Public Sector Member	Timothy White	Michigan
Public Sector Member	Michelle Wilson	Arizona
Private Sector Member	Holly Alfano	Independent Lubricant Manufacturers Association
Private Sector Member	Matt Bjornson	Bjornson Oil Company
Private Sector Member	Bill Cannella	Chevron Global Downstream, LLC
Private Sector Member	Chuck Corr	Archer Daniels Midland Company
Private Sector Member	Davis Cosey	Davis Oil Company
Private Sector Member	Kelly Davis	Renewable Fuels Association
Private Sector Member	Ed Dougherty	Sunoco Logistics
Private Sector Member	Scott Fenwick	National Biodiesel Board
Private Sector Member	David Fialkov	NATSO
Private Sector Member	Rick Fragnito	Shell
Private Sector Member	Philip Guillemette	Flint Hills Resources, LP
Private Sector Member	John Harkins	Sunoco Logistics
Private Sector Member	Marilyn Herman	Herman and Associates
Private Sector Member	Cal Hodge	A 2nd Opinion, Inc.
Private Sector Member	Joanna Johnson	Automotive Oil Exchange Association
Private Sector Member	Brian Kernke	Loves Travel Stops
Private Sector Member	Stephen Kirby	General Motors
Private Sector Member	David A. Kovach	BP Products
Private Sector Member	Mike Kunselman	Center for Quality Assurance
Private Sector Member	Jeffrey Leiter	Bassman, Mitchell, Alfano & Leiter Chtd.
Private Sector Member	Russ Lewis	Marathon Petroleum, LLC
Private Sector Member	Michael Lynch	ExxonMobil Corporation
Private Sector Member	Scott Mason	Phillips 66
Private Sector Member	John Maynes	PMCI

Private Sector Member	Beverly Michels	BP Products
Private Sector Member	Kristi Moore	KMoore Consulting, LLC
Private Sector Member	Manuch Nikanjam	Chevron Global Downstream, LLC
Private Sector Member	Brian Parnell	Mapco Express
Private Sector Member	Keith Penn	Colonial Pipeline Company
Private Sector Member	Derek Regal	Tesoro Companies, Inc.
Private Sector Member	Prentiss Searles	American Petroleum Institute
Private Sector Member	Jenny Sigelko	Volkswagen Group of America
Private Sector Member	Dr. Prasad Tumati	Haltermann Solutions
Private Sector Member	Rob Underwood	Petroleum Marketers Association of America
Private Sector Member	Marie Valentine	Toyota - TEMA - TTC
Private Sector Member	Steve Vander Griend	ICM, Inc.

Packaging and Labeling Subcommittee		
Office	Name	Affiliation
Committee Chair	Christopher Guay	Procter and Gamble, Co.
NIST Technical Advisor	David Sefcik	NIST, Office of Weights and Measures
Public Sector - Central	Nicholas Owens	Stark County Weights and Measures, Ohio
Public Sector - Northeastern	Frank Greene	Connecticut
Public Sector - Southern	Hal Prince	Florida
Public Sector - Western	Angela Godwin	County of Ventura, California
Private Sector Member	Ann Boeckman	Kraft Food Group, Inc.
Private Sector Member	Krister Hard af Segerstad	IKEA North America Services, LLC
Private Sector Member	Zina Juroch	Pier 1 Imports

Promotional Tool Kit Task Group		
Office	Name	Affiliation
Chair	Stephen Benjamin	North Carolina
Public Sector Member	Kurt Floren	Los Angeles County
Public Sector Member	Jerry Buendel	Washington
Private Sector Member	Henry Oppermann	Weights and Measures Consulting
Private Sector Member	John Hughes	Rice Lake Weighing Systems, Inc.

Safety Task Group		
Chair	Julie Quinn	Minnesota
Public Sector Member	Jason Flint	New Jersey
Public Sector Member	Georgia Harris	NIST, Office of Weights and Measures
Public Sector Member	Elizabeth Koncki	Maryland
Public Sector Member	Matt Maiten	Santa Barbara County, California

Public Sector Member	Brenda Sharkey	South Dakota
Public Sector Member	Mike Sikula	New York
Private Sector Member	Tisha Arriaga	Marathon Petroleum, LLC
Private Sector Member	Bill Callaway	Crompco
Private Sector Member	Remy Cano	Northwest Tank and Environmental Services, Inc.
Private Sector Member	Joe Grell	Rice Lake Weighing Systems, Inc.
Private Sector Member	Brad Fryburger	Rinstrum, Inc.
Private Sector Member	Robert LaGasse	Mulch and Soil Council
Private Sector Member	John Lawn	Rinstrum, Inc.

weat, rounty, rish and se	afood Method of Sale Task Group	
Office	Name	Affiliation
Co-Chair	David Sefcik	NIST, Office of Weights and Measures
Co-Chair	Lisa Warfield	NIST, Office of Weights and Measures
Public Sector Member	Cheryl Ayer	New Hampshire
Public Sector Member	Stephen Benjamin	North Carolina
Public Sector Member	Charles Carroll	Massachusetts
Public Sector Member	Fran Elson-Houston	Ohio
Public Sector Member	Kurt Floren	Los Angeles County, California
Public Sector Member	Roger Frazier	Arkansas
Public Sector Member	Jason Glass	Kentucky
Public Sector Member	Brett Gurney	Utah
Public Sector Member	Milton Hargrave	Virginia
Public Sector Member	Ryanne Hartman	Michigan
Public Sector Member	Lori Jacobson	South Dakota
Public Sector Member	Tim Osmer	New Hampshire
Public Sector Member	Hal Prince	Florida
Public Sector Member	Louis Sakin	Towns of Hopkinton/Northbridge, Massachusetts
Public Sector Member	Ken Tichota	Nebraska
Public Sector Member	Philip Wright	Texas
Private Sector Member	Dave Davis	Utah Food Industry Association
Private Sector Member	Linda Doherty	New Jersey Food Council
Private Sector Member	Eric Hardin	The Fresh Market, Inc.
Private Sector Member	Vincent Orr	Whole Foods Market
Private Sector Member	Audrey Patterson	King Williams and Gleason LLP
Private Sector Member	Michael Roberson	Publix Supermarkets
Private Sector Member	Kevin Schneider	Giant Food
Private Sector Member	Elizabeth Tansing	Food Marketing Institute

Weigh-in-Motion Task Group		
Office	Name	Affiliation
Co-Chair	Tim Chesser	Arkansas
Co-Chair	Alan Walker	Florida
NTEP Technical Advisor	Darrell Flocken	NCWM
NIST Technical Advisor	Rick Harshman	NIST, Office of Weights and Measures
Public Sector Member	John Barton	NIST, Office of Weights and Measures
Public Sector Member	Greg Gholston	Mississippi
Public Sector Member	Lenny Goebel	Illinois
Public Sector Member	John McGuire	New Jersey
Public Sector Member	Jason Smith	South Dakota
Private Sector Member	Jon Arnold	Intercomp Company
Private Sector Member	Tim Broemmer	Rice Lake Weighing Systems, Inc.
Private Sector Member	Scott Davidson	Mettler-Toledo, LLC
Private Sector Member	James Faas	YRC Freight
Private Sector Member	Brad Fryburger	Rinstrum, Inc.
Private Sector Member	Eric Golden	Cardinal Scale Manufacturing, Co.
Private Sector Member	Joe Grell	Rice Lake Weighing Systems, Inc.
Private Sector Member	Randy Hanson	International Road Dynamics
Private Sector Member	John Lawn	Rinstrum, Inc.
Private Sector Member	Joe Rickey	Rinstrum, Inc.
Private Sector Member	Louis Straub	Fairbanks Scale, Inc.
Private Sector Member	Richard Suiter	Richard Suiter Consulting
Private Sector Member	Brian Taylor	Intelligent Imaging Systems
Private Sector Member	Russ Vires	Mettler-Toledo, LLC
Private Sector Member	Sam Wimsett	Cardinal Scale Manufacturing, Co.
Private Sector Member	Matt Young	Intercomp Company

Multiple Dimensions Measuring Device Work Group		
Office	Name	Affiliation
Chair	Robert Kennington	Quantronix, Inc.
NTEP Administrator	Jim Truex	NCWM
NTEP Specialist	Darrell Flocken	NCWM
Technical Advisor	Rick Harshman	NIST, Office of Weights and Measures
Public Sector Member	Tom Buck	Ohio
Public Sector Member	Fran Elson-Houston	Ohio
Public Sector Member	Pascal Turgeon	Measurement Canada, Policy/Regulations Group
Private Sector Member	Sprague Ackley	Honeywell
Private Sector Member	Seth Bauer	Old Dominion Freight
Private Sector Member	Bill Danderand	FedEx Freight
Private Sector Member	Scott Davidson	Mettler-Toledo, LLC
Private Sector Member	Michael Eichenberg	FreightSnap, LLC
Private Sector Member	Matthew Erim	National Motor Freight Traffic Association
Private Sector Member	Justin Harper	AOA Xinetics/NGC
Private Sector Member	Scott Henry	Zebra Technologies
Private Sector Member	Uwe Mohr	Vitronic
Private Sector Member	Scott Murchison	Zebra Technologies
Private Sector Member	Don Newell	National Motor Freight Traffic Association
Private Sector Member	Sameer Parmar	SICK, Inc.
Private Sector Member	Weston Privett	XPO LTL
Private Sector Member	Tony Romeo	Datalogic
Private Sector Member	Christopher Senneff	Rice Lake Weighing Systems, Inc.
Private Sector Member	Richard Shipman	Rice Lake Weighing Systems, Inc.
Private Sector Member	Mike Stutler	United Parcel Service
Private Sector Member	Richard Suiter	Richard Suiter Consulting
Private Sector Member	Russ Vires	Mettler-Toledo, LLC
Private Sector Member	Scott Wigginton	United Parcel Service

NTEP Belt-Conveyor Sector		
Office	Name	Affiliation
Chair	Peter Sirrico	Thayer Scale / Hyer Industries
NTEP Administrator	Jim Truex	NCWM
NTEP Specialist	Darrell Flocken	NCWM
Technical Advisor	John Barton	NIST, Office of Weights and Measures
Public Sector Member	Tina Butcher	NIST, Office of Weights and Measures
Public Sector Member	Zacharias Tripoulas	Maryland
Public Sector Member	Thomas Vormittag	Nevada
Private Sector Member	Rafael Jimenez	Association of American Railroads Transportation Technology Center, Inc.
Private Sector Member	Jason Kukachka	Thermo Fisher Scientific

NTEP Grain Analyzer Sector		
Office	Name	Affiliation
Chair	Karl Cunningham	Illinois
NTEP Administrator	Jim Truex	NCWM
NTEP Specialist	Darrell Flocken	NCWM
Technical Advisor	G. Diane Lee	NIST, Office of Weights and Measures
Advisory Member	Cassie Eigenmann	Retired
Public Sector Member	Randy Burns	Arkansas
Public Sector Member	Tina Butcher	NIST, Office of Weights and Measures
Public Sector Member	Ivan Hankins	lowa
Public Sector Member	Thomas Hughes	Missouri
Public Sector Member	Jason Jordan	USDA, GIPSA, Technical Services Division
Private Sector Member	Jeffrey Adkisson	Grain and Feed Association of Illinois
Private Sector Member	Rachel Beiswenger	TSI Incorporated
Private Sector Member	Martin Clements	The Steinlite Corporation
Private Sector Member	Kathy Conover	DICKEY-john Corporation
Private Sector Member	Andrew Gell	Foss North America
Private Sector Member	Charles Hurburgh, Jr.	Iowa State University
Private Sector Member	Jess McCluer	National Grain and Feed Association
Private Sector Member	Thomas Runyon	Seedburo Equipment Co.

NTEP Measuring Sector		
Office	Name	Affiliation
Chair	Michael Keilty	Endress + Hauser Flowtec AG, USA
NTEP Administrator	Jim Truex	NCWM
NTEP Specialist	Darrell Flocken	NCWM
Technical Advisor	Clark Cooney	California Division of Measurement Standards
Public Sector Member	Luciano Burtini	Measurement Canada
Public Sector Member	Tina Butcher	NIST, Office of Weights and Measures
Public Sector Member	Joe Eccleston	Maryland
Public Sector Member	Allen Katalinic	North Carolina
Public Sector Member	John Roach	California
Private Sector Member	Steve Bar	Bennett Pump Company
Private Sector Member	Marc Buttler	Emerson Process Management / Micro Motion
Private Sector Member	Craig Cavanaugh	Tuthill Transfer Systems
Private Sector Member	Rodney Cooper	Brodie International
Private Sector Member	Constantine Cotsoradis	Flint Hills Resources
Private Sector Member	Ronnell Gallon	Zenner Performance Meters, Inc.
Private Sector Member	Paul Glowacki	Murray Equipment, Inc.
Private Sector Member	Gordon Johnson	Gilbarco, Inc.
Private Sector Member	Dmitri Karimov	Liquid Controls, LLC
Private Sector Member	Douglas Long	RDM Industrial Electronics
Private Sector Member	Andrew MacAllister	Daniel Measurement and Control
Private Sector Member	Wade Mattar	Invensys / Foxboro
Private Sector Member	Richard Miller	FMC Technologies Measurement Solutions, Inc.
Private Sector Member	Randy Moses	Wayne Fueling Systems
Private Sector Member	Andre Noel	Neptune Technology Group, Inc.
Private Sector Member	Christopher (Adam) Oldham	Gilbarco, Inc.
Private Sector Member	Richard Tucker	RL Tucker Consulting, LLC

NTEP Software Sector				
Office	Name	Affiliation		
Chair	James Pettinato	FMC Technologies Measurement Solutions, Inc.		
NTEP Administrator	Jim Truex	NCWM		
NTEP Specialist	Darrell Flocken	NCWM		
Secretary	Teri Gulke	Liquid Controls, LLC		
Technical Advisor	Doug Bliss	Mettler-Toledo, LLC		
Public Sector Member	Andrei Brezoica	California		
Public Sector Member	Tom Buck	Ohio		
Public Sector Member	Luciano Burtini	Measurement Canada		
Public Sector Member	Joe Eccleston	Maryland		
Public Sector Member	Eric Morabito	New York		
Public Sector Member	John Roach	California		
Public Sector Member	Ambler Thompson	NIST, Office of Weights and Measures		
Public Sector Member	Zacharias Tripoulas	Maryland		
Private Sector Member	Mary Abens	Emerson Process Management		
Private Sector Member	John Atwood	Tyson Foods		
Private Sector Member	Gary Benjamin	NCR Corporation		
Private Sector Member	Benjamin Bertz	Red Seal Measurement		
Private Sector Member	Kevin Detert	Avery Weigh-Tronix		
Private Sector Member	Andrew Gell	Foss North America		
Private Sector Member	Keith Harper	Gencor Industries, Inc.		
Private Sector Member	Tony Herrin	Cardinal Scale Manufacturing, Co.		
Private Sector Member	Dominic Meyer	KSi Conveyors, Inc.		
Private Sector Member	Richard Miller	FMC Technologies Measurement Solutions, Inc.		
Private Sector Member	Christopher (Adam) Oldham	Gilbarco, Inc.		
Private Sector Member	Mike Roach	VeriFone		
Private Sector Member	Robin Sax	CompuWeigh Corporation		
Private Sector Member	David Vande Berg	Vande Berg Scales		
Private Sector Member	Caleb Westadt	TSI Incorporated		
Private Sector Member	John Wind	Bizerba USA, Inc.		
Private Sector Member	Kraig Wooddell	Hobart		

NTEP Weighing Sector				
Office	Name	Affiliation		
Chair	Rob Upright	Vishay Transducers		
NTEP Administrator	Jim Truex	NCWM		
NTEP Specialist	Darrell Flocken	NCWM		
Technical Advisor	Rick Harshman	NIST, Office of Weights and Measures		
Advisory Member	Robert Feezor	Retired		
Public Sector Member	L. Cary Ainsworth	USDA, GIPSA		
Public Sector Member	Tina Butcher	NIST, Office of Weights and Measures		
Public Sector Member	Kevin Chesnutwood	NIST, Office of Weights and Measures		
Public Sector Member	Fran Elson-Houston	Ohio		
Public Sector Member	Nathan Gardner	Oregon		
Public Sector Member	Marcus Harwitz	USDA, GIPSA, FGIS		
Public Sector Member	Robert Meadows	Kansas		
Public Sector Member	Eric Morabito	New York		
Public Sector Member	Zacharias Tripoulas	Maryland		
Public Sector Member	Pascal Turgeon	Measurement Canada		
Public Sector Member	Juana Williams	NIST, Office of Weights and Measures		
Private Sector Member	Steven Beitzel	Systems Associates, Inc.		
Private Sector Member	Neil Copley	Thurman Scale Co.		
Private Sector Member	Bill Danderand	FedEx Freight		
Private Sector Member	Mitchell Eyles	Flintec, Inc.		
Private Sector Member	Brad Fryburger	Rinstrum, Inc.		
Private Sector Member	Eric Golden	Cardinal Scale Manufacturing, Co.		
Private Sector Member	Jon Heinlein	Transcell Technology, Inc.		
Private Sector Member	Scott Henry	Zebra Technologies		
Private Sector Member	Sam Jalahej	Totalcomp, Inc.		
Private Sector Member	Rafael Jimenez	Association of American Railroads Transportation Technology Center, Inc.		
Private Sector Member	John Lawn	Rinstrum, Inc.		
Private Sector Member	L. Edward Luthy	Schenck Process Transport N.A.		
Private Sector Member	Weston Privett	XPO LTL		
Private Sector Member	Thomas Rice	Mettler-Toledo, LLC		
Private Sector Member	Louis Straub	Fairbanks Scale, Inc.		
Private Sector Member	Russ Vires	Mettler-Toledo, LLC		
Private Sector Member	Jerry Wang	A&D Engineering, Inc.		

Central Weights and	Measures Associ	ation (CWMA) www.c	wma.net				
	Illinois	Kansas	Missouri	Ohio			
States	Indiana	Michigan	Nebraska	South Dakota			
	Iowa	Minnesota	North Dakota	Wisconsin			
Contact	Sherry Turvey			(785) 564-6681			
Contact	Kansas Depa	rtment of Agriculture		sherry.turvey@ks.	gov		
Annual Meeting	May 21 – 24,	2018		Springfield, Illinois			
Interim Meeting	October 16 -	18, 2017		St. Charles, Misso	St. Charles, Missouri		
Northeastern Weight	s and Measures A	association (NEWMA)	www.newma.us				
	Connecticut	New Hampshire	Pennsylvania	Vermont			
States	Maine	New Jersey	Puerto Rico				
	Massachuset	ts New York	Rhode Island				
	James Cassic	James Cassidy					
Contact	City of Camb	City of Cambridge Weights and Measures			(617) 349-6133 icassidy@cambridgema.gov		
	Department			<u>jcassidy@carribili</u>	<u>ugema.gov</u>		
Annual Meeting	TBD, 2018	TBD, 2018			TBD		
Interim Meeting	October 25 –	October 25 – 26, 2017			Portland, Maine		
Southern Weights an	d Measures Assoc	ciation (SWMA) www.	swma.org				
	Alabama	District of Columbia	Kentucky	Mississippi	South Carolina	US Virgin Islands	
States	Arkansas	Florida	Louisiana	North Carolina	Tennessee	Virginia	
	Delaware	Georgia	Maryland	Oklahoma	Texas	West Virginia	
Contact	Tim Chesser	Tim Chesser			(501) 570-1154		
Contact	Arkansas Bure	Arkansas Bureau of Standards			tim.chesser@aspb.ar.gov		
Annual Meeting	October 8 - 1	October 8 – 11, 2017			North Little Rock, Arkansas		
Western Weights and	d Measures Assoc	iation (WWMA) www.v	vesternwma.org				
	Alaska	Colorado	Montana	Oregon	Wyoming		
States	Arizona	Hawaii	Nevada	Utah			
	California	Idaho	New Mexico	Washington			
Cambaat	Michelle Wilso	Michelle Wilson			(602) 771-4933		
Contact	Arizona Depa	Arizona Department of Weights and Measures			mwilson@azda.gov		
Annual Meeting	September 2	4 – 28, 2017		Scottsdale, Arizor	<u></u> na		

Past Chairmen			
Conference	Year	Location	Chairman
1 st	1905	Washington, D.C.	Dr. S.W. Stratton, Bureau of Standards
2 nd	1906	Washington, D.C.	Dr. S.W. Stratton, Bureau of Standards
3 rd	1907	Washington, D.C.	Dr. S.W. Stratton, Bureau of Standards
4 th	1908	Washington, D.C.	Dr. S.W. Stratton, Bureau of Standards
	1909	Conference Was Not Held	
5 th	1910	Washington, D.C.	Dr. S.W. Stratton, Bureau of Standards
6 th	1911	Washington, D.C.	Dr. S.W. Stratton, Bureau of Standards
7 th	1912	Washington, D.C.	Dr. S.W. Stratton, Bureau of Standards
8 th	1913	Washington, D.C.	Dr. S.W. Stratton, Bureau of Standards
9 th	1914	Washington, D.C.	Dr. S.W. Stratton, Bureau of Standards
10 th	1915	Washington, D.C.	Dr. S.W. Stratton, Bureau of Standards
11 th	1916	Washington, D.C.	Dr. S.W. Stratton, Bureau of Standards
	1917	Conference Was Not Held	
	1918	Conference Was Not Held	
12 th	1919	Washington, D.C.	Dr. S.W. Stratton, Bureau of Standards
13 th	1920	Washington, D.C.	Dr. S.W. Stratton, Bureau of Standards
14 th	1921	Washington, D.C.	Dr. S.W. Stratton, Bureau of Standards
15 th	1922	Washington, D.C.	Dr. S.W. Stratton, Bureau of Standards
16 th	1923	Washington, D.C.	Dr. George Burgess, Bureau of Standards
17 th	1924	Washington, D.C.	Dr. George Burgess, Bureau of Standards
18 th	1925	Washington, D.C.	Dr. George Burgess, Bureau of Standards
19 th	1926	Washington, D.C.	Dr. George Burgess, Bureau of Standards
20 th	1927	Washington, D.C.	Dr. George Burgess, Bureau of Standards
21st	1928	Washington, D.C.	Dr. George Burgess, Bureau of Standards
22 nd	1929	Washington, D.C.	Dr. George Burgess, Bureau of Standards
23 rd	1930	Washington, D.C.	Dr. George Burgess, Bureau of Standards
24 th	1931	Washington, D.C.	Dr. George Burgess, Bureau of Standards
	1932	Conference Was Not Held	<i>C C</i> ,
	1933	Conference Was Not Held	
	1934	Conference Was Not Held	
25 th	1935	Washington, D.C.	Dr. Lyman Briggs, National Bureau of Standards
26 th	1936	Washington, D.C.	Dr. Lyman Briggs, National Bureau of Standards
27 th	1937	Washington, D.C.	Dr. Lyman Briggs, National Bureau of Standards
28 th	1938	Washington, D.C.	Dr. Lyman Briggs, National Bureau of Standards
29 th	1939	Washington, D.C.	Dr. Lyman Briggs, National Bureau of Standards
30 th	1940	Washington, D.C.	Dr. Lyman Briggs, National Bureau of Standards
31 st	1941	Washington, D.C.	Dr. Lyman Briggs, National Bureau of Standards
	1942	Conference Was Not Held	, 60.7 2 2 2 2
	1943	Conference Was Not Held	
	1944	Conference Was Not Held	
	1945	Conference Was Not Held	
32 nd	1946	Washington, D.C.	Dr. E.U. Condon, National Bureau of Standards
33 rd	1947	Washington, D.C.	Dr. E.U. Condon, National Bureau of Standards
-	1948	Conference Was Not Held	
34 th	1949	Washington, D.C.	Dr. E.U. Condon, National Bureau of Standards
35 th	1950	Washington, D.C.	Dr. E.U. Condon, National Bureau of Standards
36 th	1951	Washington, D.C.	Dr. E.U. Condon, National Bureau of Standards
37 th	1952	Washington, D.C.	Dr. A.V. Astin, National Bureau of Standards
38 th	1953	Washington, D.C.	Dr. A.V. Astin, National Bureau of Standards
39 th	1954	Washington, D.C.	Dr. A.V. Astin, National Bureau of Standards
40 th	1955	Washington, D.C.	Dr. A.V. Astin, National Bureau of Standards
10	1/33	11 dollington, D.C.	Di. 11. 1. 1 Sun, Hadional Dulcau of Standards

		Pas	t Chairmen
Conference	Year	Location	Chairman
41 st	1956	Washington, D.C.	Dr. A.V. Astin, National Bureau of Standards
42 nd	1957	Washington, D.C.	Dr. A.V. Astin, National Bureau of Standards
43 rd	1958	Washington, D.C.	J.P. McBride, MA
44 th	1959	Washington, D.C.	C.M. Fuller, CA
45 th	1960	Washington, D.C.	H.E. Crawford, FL
46 th	1961	Washington, D.C.	R.E. Meek, IN
47 th	1962	Washington, D.C.	Robert Williams, NY
48 th	1963	Washington, D.C.	C.H. Stender, SC
49 th	1964	Washington, D.C.	D.M. Turnbull, WA
50 th	1965	Washington, D.C	V.D. Campbell, OH
51 st	1966	Denver, CO	J.F. True, KS
52 nd	1967	Washington, D.C.	J.E. Bowen, MA
53 rd	1968	Washington, D.C.	C.C. Morgan, IN
54 th	1969	Washington, D.C.	S.H. Christie, NJ
55 th	1970	Salt Lake City, UT	R.W. Searles, OH
56 th	1971	Washington, D.C.	M. Jennings, TN
57 th	1972	Washington, D.C.	E.H. Black, CA
58 th	1973	Minneapolis, MN	George Johnson, KY
59 th	1974	Washington, D.C.	John Lewis, WA
60 th	1975	San Diego, CA	Sydney Andrews, FL
61 st	1976	Washington, D.C.	Richard Thompson, MD
62 nd	1977	Dallas, TX	Earl Prideaux, CO
63 rd	1978	Washington, D.C.	James Lyles, VA
64 th	1979	Portland, OR	Kendrick Simila, OR
65 th	1980	Washington, D.C.	Charles Vincent, TX
66 th	1981	St. Louis, MO	Edward Stadolnik, MA
67 th	1982	Atlanta, GA	Edward Heffron, MI
68 th	1983	Sacramento, CA	Charles Greene, NM
69 th	1984	Boston, MA	Sam Hindsman, AR
70 th	1985	Washington, D.C.	Ezio Delfino, CA
71 st	1986	Albuquerque, NM	George Mattimoe, HI
72 nd	1987	Little Rock, AR	Frank Nagele, MI
73 rd	1988	Grand Rapids, MI	Darrell Guensler, CA
74 th	1989	Seattle, WA	John Bartfai, NY
75 th	1990	Washington, D.C.	Fred Gerk, NM
76 th 77 th	1991	Philadelphia, PA	N. David Smith, NC
78 th	1992	Nashville, TN	Sidney Colbrook, IL
78 th	1993	Kansas City, MO	Allan Nelson, CT
80 th	1994	San Diego, CA Portland, ME	Thomas Geiler, MA
80 ^{ss}	1995 1996	New Orleans, LA	James Truex, OH Charles Gardner, NY
81 st	1996	Chicago, IL	Barbara Bloch, CA
82 rd	1997	Portland, OR	Steven Malone, NE
84 th	1998	Burlington, VT	Aves Thompson, AK
85 th	2000	Richmond, VA	Wes Diggs, VA
86 th	2000	Washington, DC	Louis Straub, MD
87 th	2001	Cincinnati, OH	Ronald Murdock, NC
88 th	2002	Sparks, NV	Ross Andersen, NY
89 th	2003	Pittsburgh, PA	Dennis Ehrhart, AZ
90 th	2004	Orlando, FL	Wes Diggs, VA
91 st	2006	Chicago, IL	Don Onwiler, NE
/1	2000	Cincago, in	Don Onwhor, IL

Past Chairmen				
Conference	Year	Location	Chairman	
92 nd	2007	Salt Lake City, UT	Michael Cleary, CA	
93 rd	2008	Burlington, VT	Judy Cardin, WI	
94 th	2009	San Antonio, TX	Jack Kane, MT	
95 th	2010	St. Paul, MN	Randy Jennings, TN	
96 th	2011	Missoula, MT	Tim Tyson, KS	
97 th	2012	Portland, ME	Kurt Floren, CA	
98 th	2013	Louisville, KY	Stephen Benjamin, NC	
99 th	2014	Detroit, MI	John Gaccione, NY	
100 th	2015	Philadelphia, PA	Ronald Hayes, MO	
101st	2016	Denver, CO	Jerry Buendel, WA	

Past Chairmen

General Information

PURPOSE

NCWM meetings are held throughout the year to develop the national standards that are adopted by NCWM and published in *NIST Handbooks 44*, 130, and 133. At the Annual Meeting, committees will conduct Open Hearings where all attendees can offer comments to the committees on items printed in the Committee Interim Reports. Following Open Hearings, the committees will convene in work sessions to prepare addendum sheets that modify their reports. Items given voting status by the committees will be presented during the Voting Sessions on Wednesday and Thursday. Active members in attendance may vote on committee recommendations to amend the national standards.

COMMITTEE REFERENCE KEY

The Interim Committee Reports are presented in *NCWM Publication 16*. All agenda items to be addressed by the committees are assigned reference key numbers as follows:

Reference Key	Committee
1000 Series	Board of Directors (BOD)
2000 Series	Laws and Regulations Committee (L&R)
3000 Series	Specifications and Tolerances Committee (S&T)
4000 Series	Professional Development Committee (PDC)
5000 Series	National Type Evaluation Program Committee (NTEP)
8000 Series	Nominating Committee

APPENDICES

Additional letters, presentations and data may have been part of the committee's consideration. Please refer to www.ncwm.net/meetings/annual/publication-16 to review these documents.

DESIGNATION OF ITEM STATUS

The Committee Interim Reports contain recommendations and information on items discussed at the 2017 NCWM Interim Meeting held January 8-11, 2017, in San Antonio, Texas. These reports form the basis for conduct of the committee meetings. Each committee will address the items in its report during Open Hearings.

The status of each item contained in the Committee Interim Reports is designated as one of the following:

- **Developing Item:** The item is designated with a "**D**" to indicate an item has merit; however, the item was returned to the submitter or other designated party for further development before any action can be taken at the national level.
- **Informational Item:** The item is designated with an "**T**" to indicate the item is under consideration by the committee but not proposed for Voting.

- **Voting Item:** The item is designated with a "**V**" to indicate the committee is making recommendations requiring a vote by the active members of NCWM. The recommended language to be voted on is in **bold** face type.
- Withdrawn Item: The item is designated with a "W" to indicate the item has been removed from consideration by the committee.

Some Voting Items are considered individually; others may be grouped in a consent calendar. Consent calendar items are Voting Items that the committee has assembled as a single Voting Item during their deliberation after the Open Hearings on the assumption that the items are without opposition and will not require discussion. The Voting Items that have been grouped into consent calendar items will be listed on the addendum sheets which are published during the week. Prior to adoption of the consent calendar, the committee will entertain any requests from the floor to remove specific items from the consent calendar to be discussed and voted upon individually.

Committees may change the status designation of agenda items (Developing, Informational, Voting, and Withdrawn) up until the report is adopted, except that items which are marked Developing, Informational or Withdrawn cannot be changed to Voting Status. Any change from the Committee Interim Report (as contained in this publication) or from what appears on the addendum sheets will be explained to the attendees prior to a motion and will be acted upon by the active members of NCWM prior to calling for the vote.

ADDENDUM SHEETS

Modifications to the Committee Interim Reports will be documented in the form of addendum sheets prepared by the committees following the Open Hearings. The addendum sheets will be made available to attendees no later than 8:00 p.m. on Tuesday, July 18, 2017, in Prefunction on 17th Floor of the Omni William Penn Hotel. Committee Interim Reports may be further modified as a result of actions taken by the committee or membership during the Voting Sessions on July 19-20, 2017.

VOTING SYSTEM

All registered attendees may speak to the issues on the floor, both business and technical items. However, the adoption of final reports of committees on technical issues, as well as other technical issues, is to be decided by a formal vote of the active members in accordance with the following voting structures and procedures. Please see NCWM Bylaws at www.ncwm.net/about/bylaws for a complete description of the voting system.

House of State Representatives:

This body is comprised of one active member from each state who is officially designated as its representative and is present and registered at the Annual Meeting. They shall vote on:

- all business issues relating to NCWM, Inc.
- technical questions before the Corporation, including reports and recommendations of all Standing Committees
- technical issues relating to weights and measures; technical handbooks; and legal metrology.

Members of this house are identified by a maroon name tag ribbon with the word "Representative."

House of Delegates:

This body is comprised of all other active members who are registered and present at the Annual Meeting and those not seated in the House of State Representatives. They shall vote on:

• all business issues relating to NCWM, Inc.

- technical questions before the Corporation, including reports and recommendations of all Standing Committees
- technical issues relating to weights and measures; technical handbooks; and legal metrology.

Members of this house are identified by a blue name tag ribbon with the word "Delegate."

House of General Membership:

This body is comprised of associate and advisory members who are present and registered at the Annual Meeting. They shall vote on all business issues relating to NCWM, Inc.

WRITTEN COMMENTS OR ORAL STATEMENTS

Any person or organization wanting to provide a formal presentation during a committee session should make the request in writing to the Executive Director. Reasonable limitations on time allotted for presentations will be imposed. The process to request permission to give a presentation is available at:

www.ncwm.net/meetings/annual/meeting-process. Note: Only registered attendees may make presentations.

National Conference on Weights and Measures Attn: Don Onwiler, Executive Director 1135 M Street, Suite 110 Lincoln, NE 68508 (402) 434-4880 don.onwiler@ncwm.net

PARTICIPATION

All sessions are open to registered attendees of the conference. If a 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 NCWM 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. Please note that a one-day notice will not be possible if a closed meeting is called on Sunday. Since participants may make their travel reservations to attend technical meetings scheduled for Sunday, every effort will be made to limit any required closed meetings to only part of Sunday.

REPORTS

There will not be a transcript made of the proceedings of the Annual Meeting. Each committee will prepare its annual report containing its recommendations based upon the presentations, discussions, and deliberations on all matters in its interim report that were addressed during the Annual Meeting. These reports will be published in the Report of the 102nd Annual Meeting of the National Conference on Weights and Measures, to be posted to NCWM website at www.ncwm.net. Electronic copies of the Report of the 102nd Annual Meeting of the National Conference

on Weights and Measures will be distributed to all members of NCWM. Other interested parties may request a copy of the publication from the Executive Secretary.

National Institute of Standards and Technology Attn: Dr. Douglas Olson, Chief 100 Bureau Drive Gaithersburg, MD 20899-2600 (301) 975-2956 douglas.olson@nist.gov

INTERIM MEETING

NCWM Interim Meeting will be held at the Sirata Beach Resort and Conference Center, St. Pete Beach, Florida, January $21^{st} - 24^{th}$, 2018.

UNITS OF MEASUREMENT

In keeping with the provisions of the Omnibus Trade and Competitiveness Act of 1988, which establishes the metric system as the preferred system of measurement for commerce and trade, units of the metric system have been used in this document, except where industry has not yet converted from the inch-pound system. In some instances, submitted proposals quoted in the committee agendas may appear in inch-pound units only.