UNITED STATES DEPARTMENT OF COMMERCE
National Institute of Standards and Technology
Gaithersburg, Maryland 20899-

August 7, 2012

MEMORANDUM FOR: RMAP Participants and Directors

From: Georgia L. Harris & Val Miller, Laboratory Metrology Program
Office of Weights and Measures

Subjects: 2013 Regional Measurement Assurance Programs (RMAP) Training

2013 Regional Measurement Assurance Program (RMAP) Training

NIST Handbook 143, Section 5.2, Table 2 notes that annual attendance at the RMAP training session is required for ongoing laboratory Recognition. Handbook 143, Program Handbook details the criteria used for WMD Laboratory Recognition. In addition, participation in ongoing RMAP proficiency tests (PTs) requires completion of training requirements to the designated level and attendance at the annual RMAP training sessions.

The 2013 Regional Measurement Assurance Program (RMAP) training events have been scheduled as noted in the table below. Training topics (see attached detailed agenda and abstracts) are selected based on annual needs assessments; input is obtained during laboratory assessments, annual reviews of submitted data, and laboratory requests.

Schedules and Locations:
The schedule, location, and contact host for each of the RMAP training is listed below. The agenda and detailed learning objectives are in the following sections. NIST will provide training content. Local hosts will provide details on hotel and local logistics as each training event approaches.

Region	Dates	City, State *(City May Change Based On Local Plans)*	Host Contact
SEMAP	April 8 to 11	Tifton, Georgia	Kontz Bennett (229) 386-3602 kontz.bennett@agr.georgia.gov
WRAP	May 6 to 10	Helena, MT	Keith Reimund (406) 449-2582 kreimund@mt.gov
NEMAP	September 9 to 13	Harrisburg, PA	Jim Gownley (717) 787-4707 jgownley@pa.gov
MidMAP	September 16 to 20	Springfield, IL	Mike Rockford (217) 785-8480 mike.rockford@illinois.gov
SWAP	September 23 to 27	Phoenix, AZ	Brian Sellers (602) 771-4938 sellers@azdwm.gov

Registration:
R*egistration fees* for the RMAP training will be determined by the local hosts in conjunction with NIST assistance. Every effort will be made to keep registration fees to a minimum. Specific details about registration will be sent with information for each RMAP. The OWM database will be used to generate attendee registrations and lists and shared with each host (this will enable tracking, full contact lists, and preparation of attendees lists and training certificates.)

Detailed Training Agenda:

Sessions will be held from 8:00 am to 5:00 pm each day.

Monday	Tuesday (Val Miller)	Wednesday (Jose Torres)	Thursday (Mark Ruefenacht)	Friday
Round Table (ALL)	PT Reports and Planning PT Analysis	Updated Statistics and Uncertainties - Concepts and Theory	Handbook 105-1 DRAFT Updates and Collection of Input	Travel
Lunch	Lunch	Lunch	Lunch	
Mass and Force Group Technical Training and Updates	Excel Tips and Tricks and Best Practice Sharing	Statistics and Uncertainties - Case Studies and Examples	Handbook 105-1 DRAFT Updates and Collection of Input	

Abstracts and Learning Objectives

Laboratory Round Table. Laboratory round table sessions help to identify major trends and changes among the laboratory community. Reports focus on changes and challenges related to facilities, equipment, standards, staffing, operations, and economic/workload issues. These items are covered in Handbook 143 and ISO/IEC 17025, Sections 5.2, 5.3, 5.4, 5.5, and 5.6. Specific follow up actions are identified.

Mass and Force Group Updates
Individuals from the NIST Mass and Force Group will present updated information about the stability of mass standards and the latest research, updates and developments regarding mass calibrations. This will be a great opportunity to bring your questions!

PT Reviews and Planning. Proficiency testing results are presented and analyses and corrective actions are discussed. Planning is done to ensure that every laboratory has a PT available to cover every area of their scope at least once every four years. PT Plans must now be available for every laboratory and are a new Accreditation Requirement (every accredited laboratory must have a PT Plan available for their Accreditation Body.)

Excel Tips and Tricks – Sharing Best Practices Using Excel

This will be an interactive workshop in teams and with sharing expertise among the group on tips and tricks for using Excel in metrology laboratories. It will be a hands-on working session – participants will need laptops with Excel software. At the end of this session, participants will have a list of tools and techniques they can use in their laboratories to more efficiently and effectively use spreadsheets.

Statistics and Uncertainties

This session will review and cover intermediate and advanced statistical training on concepts related to the Guide to the Expression of Uncertainty in Measurement. It will include (but be not limited to) topics related to alternative distributions, combining degrees of freedom, selection of coverage factors and will build on and supplement topics covered in the NIST Fundamentals of Metrology, Mass Metrology, and Volume Metrology seminars. At the end of this session, participants will be able to answer specific questions about how to calculate and report uncertainties with additional details not routinely covered in other training sessions. They will successfully calculate uncertainties using alternative distributions and non-standard degrees of freedom and coverage factors.

Handbook 105-1, Class F Field Standard Weights

This workshop will review the current documentary standards related to mass/weight specifications (e.g., NIST HB 15-1, ASTM E617, & OIML R111). Proposed changes and updates to NIST HB 105-1 will be highlighted. Participants will have an opportunity to provide feedback through discussions and later through OWM surveys to the proposed changes in NIST HB 105-1. Technical highlights will be illustrated for various weight manufacturing specifications (e.g., weight material, density, construction, etc.). Team activities will be incorporated throughout the workshop to enhance feedback and discussion. At the conclusion of the workshop participants, using their notes and handouts, will be able to compare and contrast the technical differences between the current documentary standards related to mass and weights; describe the proposed changes to NIST HB 105-1; and, choose appropriate mass/weight specifications for their application.