

Form 1: OWM PT Feedback and Inquiry and Complaint Form

Created by		Date	
Action Type^a	<i>Select one</i>		
Title/Short Description	<i>Create a title or short description that can easily be referenced</i>		
Name (Title) of the Applicable PT	<i>Enter the name of the PT in question (or note "General")</i>		
Observation(s)	<i>Describe in clear terms the concern that needs to be addressed</i>		
Risk Assessment (if any known)	<i>Assess the risk to your laboratory or the program as a result of the observation</i>		
Suggested Action(s) (if any)	<i>Describe what action(s) is proposed if any</i>		
OWM Evaluation and Resolution (internal only)	<i>Describe the final evaluation(s) and action(s) taken, if any, to resolve the feedback or complaint; reference the OWM PT Action Item Form if applicable</i>		
OWM Receipt Date		Form Received by	
Evaluation Date		Evaluation Conducted by	

^aAction Types: Corrective Actions (CA), Risk Minimization (RM), Improvement Actions (IA), General Feedback (F), Tribute (T)

Form 2: OWM PT Participation Request – Training/Qualification Form

This form is to be used to obtain OWM approvals for any participants who are not part of the OWM Recognition Program or who have not attended applicable NIST OWM training seminars. In the case of the OWM Training program or State laboratory staff, participant training records are maintained in OWM program databases. Additional objective evidence may be requested or submitted with this request. Once a participant has been approved, OWM will maintain training records. If a new PT parameter is requested, additional objective evidence may be requested.

Created by		Date	
Proposed Participant Name and Laboratory	<i>Enter the name of the proposed participant and laboratory name</i>		
Name (Title) of the Applicable PT	<i>Enter the name of the PT in question (or note "General")</i>		
Laboratory Approved Signatory Status	<i>Is this person approved in your laboratory to officially review and sign calibration certificates related to the measurements associated with this specific PT (describe limitations)</i>		
Experience Summary	<i>Describe the proposed participant's applicable laboratory experience in this discipline</i>		
	Applicable Training	Source of Education or Training (Organization)	Date of Degree/Certificate/Approval
Formal Education	<i>List applicable degrees</i>	<i>List organization granting degrees</i>	<i>List applicable dates degrees granted</i>
Technical Seminars or Workshops	<i>List applicable seminars or workshops</i>	<i>List organization and/or instructor</i>	<i>List applicable dates certificates issued for successful completion</i>
On-the-job Training	<i>List applicable OJT activities that are specifically related to this PT</i>	<i>List person(s) responsible for OJT oversight</i>	<i>List applicable dates for OJT and dates approved for activity</i>
Responsible Staff Member	<i>Indicate the staff member who has previously been approved by OWM or who has completed applicable OWM training for participating in this PT who will oversee all activities of this staff member (to include care/handling, preparation, calibration, shipping, release of calibration certificates to PT Coordinator or PT Analyst</i>		
OWM Receipt Date		Form Received by	
Evaluation Date		Evaluation Conducted by	
Approved or Not Approved		Laboratory and PT Coordinator Notified of Approval Status	

Form 3: RMAP Associate Membership Application

RMAP Membership Policy Summary:

1. States (plus USDA, USVI, PR, DC, LA County) are the only **Official Regional Measurement Assurance Program (RMAP) Members** based on the historical charters of the RMAP groups and are covered under the Handbook 143 Recognition program of OWM. RMAP groups are independently operated and are NOT operated by NIST, Weights and Measures Associations, or the National Conference on Weights and Measures (NCWM).
 - a. NIST provides regular training/agenda for training as a requirement of Handbook 143 for laboratory Recognition and NIST coordinates the PT Program through the RMAPs.
 - b. States generally host the annual training events. Associate Members may host the annual training if approved by the RMAP members.
 - c. Weights and Measures Associations (Southern, Northeast, Central, Western) have agreed to co-host RMAP training events by assisting with registration, collecting registration fees, and managing contracts with hotel/site locations for training events, through working with NCWM and regional Weights and Measures registration systems.
2. Non-State **Associate Membership** in RMAPs:
 - a. Other memberships (Fed labs; Industry labs...) must be voted on and approved by State voting members as Associate Members within each RMAP. The applicant laboratory should have a RMAP member sponsor the laboratory for associate membership. It is *helpful* to have the HOST or the State in which the laboratory is based invite/sponsor the proposed member to their first meeting with the group; and
 - b. Annual attendance is required to continue being an RMAP member and to participate in PTs.
3. **Everyone** (all members, including states) **must complete the applicable NIST training prior to participation in a PT or meet OWM approval requirements** (see published policies in "NISTIR 7082" "Proficiency Test Policy Plan")
 - a. Exceptions to completing all training requirements prior to participation in a PT "may" be approved by OWM if/when
 - i. A metrologist is on staff who has completed all the training AND is onsite to oversee all RMAP PTs AND ensure that standards and processes are followed to protect the standards; AND
 - ii. Evidence of On-the-Job Training (OJT) for the applicable measurements is submitted to OWM (or has previously been submitted and is on file for that staff member who has not completed NIST Training). See Form 2 as applicable.

NOTE 1: Non-state laboratories participation in training and/or PTs may be limited or rescinded by NIST and the RMAP members based on any of the following: lack of regular attendance, failure to complete training in the case of staff leaving/retiring, ongoing PT failures, or mishandling of PT standards. Completion of training and demonstrated corrective action is required to re-approve participation.

NOTE 2: Participation in RMAP training and associated PTs and PT results may ONLY be used by the participants and their accreditation bodies for training records, PT records, and competency evaluations related to accreditation and may *not* be used for advertising and/or marketing purposes.

Agreement of RMAP Membership:

1. {Enter Name of Laboratory} laboratory agrees to the following:
 - a. Be approved as an Associate member by {Enter RMAP Group};
 - b. Have *at least one* staff member annually attend {Enter RMAP Group} regional training;
 - c. Follow instructions and procedures as specified in PT plans; and
 - d. Complete the following OWM training as needed {and provide certificates/evidence when not OWM training – see Form 2}:
 - i. Fundamentals of Metrology
 - ii. Mass (Echelon II and III)
 - iii. Advanced Mass (Echelon I)
 - iv. Volume
 - v. Measurement Area in which OWM does not provide training {evidence of other applicable training, e.g., thermometry}

Associate Laboratory Representative:

(Printed name, affiliation signature, date): _____

Laboratory Staff:

List below names of laboratory staff who have completed NIST Training and/or OJT in the measurement Areas (this table is also completed for Approved Signatories by State labs as part of the OWM Annual Recognition program).

List all personnel who are proposed to participate in Proficiency Testing, their training or OJT status, and note if they are approved signatories. Additional records for objective evidence required for any staff not completing applicable OWM training seminars (See Form 2; Update Form 2 for Staff Changes).					
Scope/Staff	{Enter Name}				
Mass Echelon I					
Mass Echelon II					
Mass Echelon III					
Mass Echelon III Weight Carts					
Mass Echelon III Wheelload Weighers					

List all personnel who are proposed to participate in Proficiency Testing, their training or OJT status, and note if they are approved signatories. Additional records for objective evidence required for any staff not completing applicable OWM training seminars (See Form 2; Update Form 2 for Staff Changes).

Scope/Staff	{Enter Name}				
Mass Echelon III Railroad Test Cars					
Volume Echelon I Gravimetric					
Volume Echelon I SVP					
Volume Echelon II Volume Transfer					
Volume Echelon II LPG					
Length					
Thermometry					
Frequency Tuning Forks					
Stopwatches					
Other (specify)					

Host/Sponsor Approval:

State Laboratory Representative

(Printed name, affiliation, signature, date): _____

OWM Approval for PT Participation:

OWM Program Staff

(Printed name, signature, date): _____

Form 4: OWM PT Action Form

Created by		Date		Action # or ID			
Action Type^a	<i>Select one</i>	Criteria^b	<i>Select one</i>	Priority^c	<i>Select one</i>	Source^d	<i>Select one</i>
Title/Short Description	<i>Create a title or short description that can easily be referenced</i>						
Finding/Observation(s)	<i>Describe in clear terms the finding that needs to be addressed</i>						
Risk Assessment	<i>Assess the risk to your laboratory as a result of the finding</i>						
Root Cause	<i>Use a common root cause analysis approach to evaluate why this happened (e.g., five whys)</i>						
Proposed Action(s)	<i>Describe what action(s) is proposed to resolve the finding(s)</i>						
Due Date		Task Assigned To					
Completion Date		Task Verified By					
Final Action(s)	<i>Describe what was the final action(s) taken to resolve the finding</i>						
Action Effectiveness	<i>Describe how was the action evaluated for effectiveness and if it proved to be effective</i>						
Evaluation Date		Task Verified By					

^aAction Types: Corrective Actions (CA), Risk Minimization (RM), Improvement Actions (IA), Not Applicable (NA); ^bCriteria: Meets Criteria (OK), Nonconformity (X), Comment (C); ^cPriority: High = 1, intermediate = 2, Low = 3; ^dSource: Complaint or Feedback (C/F), Internal Audit (A), Employee Observations (EO)

The entirety of this form is not included in the NISTIR 7214 Official Publication due to copyright limitations.

Form 5: OWM PT Program Internal Audit Form

Audit Year: _____	Audit Completion Date: _____	NISTIR 7214 (Quality Manual) Version: _____	Assessor: _____	Signature: _____
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Note: This internal audit form contains the test of the DIS ISO/IEC 17043:2022 standard. OWM staff maintain official copies of this documentary standard.

Instructions: Any “grayed text” is to be replaced as a part of the internal audit. Clearly identify what items were reviewed and specify what objective evidence was reviewed and is available.

Executive Summary:

- Summarize all non-conformities, Action Items and Forms, and Action Item log as applicable (also note if there are no action items). The output of this audit is/will be reviewed as part of the OWM PT Program Management Review.

Action Requests for the period of _____ to _____

	Actions Started	Actions Completed	Actions Reviewed for Effectiveness
Complaints:			
Corrective:			
Risk Minimization (Preventive Action):			
Improvement:			

Form 6: OWM PT Program Management Review Outline¹

Instructions:

All “grayed” text in this outline must be replaced with observations and/or summary information. Lettered items match ISO/IEC 17043, Section 8.9.2.

Executive Summary

- Include narrative summary of the overall PT Program operations and the results of this Management Review
- Include summarized SWOT (strengths, weaknesses, opportunities, threats) outputs to be used in the annual strategic planning for the Laboratory Metrology Program
- Include any short-term/long-term programmatic goals
- Include PT Program highlights with outputs and outcomes (e.g., include numbers of PTs completed, success/failure rates as well as the impact on participant laboratories and consider what/how this information is included in the State Laboratory Program Workload Survey of the NCSLI Legal Metrology Committee)

A. Changes in Relevant Internal and External Issues:

- Evaluate ILAC or Accreditation policies that could or will impact the OWM PT Program
- Identify the impact of SIM Quality System Task Force evaluations of NMI quality systems
- Identify changes or updates in applicable documentary standards
-

B. Fulfilment of Objectives:

- Identify any items that support or interfere with the OWM PT program completing its objectives in providing high quality PT activities
-
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C. Suitability of Policies and Procedures:

- Identify any policies or procedures that need to be updated or clarified
- Identify any feedback or complaints that are related to OWM policies and procedures
- Provide an overall assessment of suitability of the OWM PT program policies and procedures or need for changes

D. Status of Actions from Previous Management Reviews:

¹ This form lists the elements required by the NISTIR 7214, Proficiency Testing Quality Management System (QMS) and ISO/IEC 17043. An OWM management review is conducted at least every two years with critical components reviewed as needs arise and annually as part of the Laboratory Metrology Program strategic planning sessions to ensure continuing suitability, adequacy, and effectiveness, including the stated policies and objectives related to the OWM PT Program QMS.

- Identify Actions and Outputs from prior management reviews with status of changes or completion and evaluation of prior meeting outputs
-
-

E. Outcome of Recent Internal Audits:

- Summarize the overall results of the most recent internal audits
- Identify Actions and Outputs from prior management reviews with status of changes or completion and evaluation of prior actions from meetings
-

F. Corrective Actions:

- Identify corrective actions that were identified along with their status as open or completed and evaluation of effectiveness if actions were completed 6 months prior to this review
-
-

G. Assessments by External Bodies (if/when applicable):

- Summarize the assessment results and applicable actions if/when the program has been assessed by other NIST programs or outside assessment bodies
-
-

H. Changes in the Volume and Type of the Work or in the Range of PT Activities:

- Summarize any changes in the volume and type of work in the PT program and any changes to the range of PTs offered or available
-
-

I. Customer, Participant and Personnel Feedback:

- Identify and summarize feedback, nonconformities, or praise provided by laboratory participants, PT coordinators, PT analysts, laboratory management of the participants, or OWM staff and its management
-
-

J. Complaints and Appeals:

- Identify and summarize complaints and appeals provided by laboratory participants, PT coordinators, PT analysts, laboratory management of the participants, or OWM staff and its management

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K. Effectiveness of Implemented Improvements:

- Summarize prior actions and their effectiveness when improvements have been implemented
-
-

L. Adequacy of Resources:

- Identify any additional resources needed to operate the program adequately (see also Section on Other Relevant Factors)
-

M. Results of Risk Identification:

- Summarize risk evaluations from strategic planning (SWOT) analyses and from the evaluations of feedback, complaints, and internal audits
- Are there risks or observations related to impartiality or confidentiality?
-

N. Outcomes of the Surveillance of the Processes:

- Identify observations from the surveillance of each PT prior to issuing Final PT Reports to ensure all policies and procedures were followed (e.g., all participants were approved during PT planning; all planned evaluations were conducted; laboratories followed the procedures and handling requirements; no measurement results were communicated to participants prior to their submitting calibration certificates)
-

O. Other Relevant Factors:

- Training of staff, PT coordinators, PT analysts
- Evaluation of standard artifacts used for PTs
- Evaluation of shipping and handling costs, containers, and methods

Summary of Management Review Outputs (ISO/IEC 17043, Section 8.9.3):

(Be sure to record all decisions and actions related to the following items as a minimum and include a narrative of the meeting minutes. Include additional summary notes in the Executive Summary.)

- Effectiveness of the management system and its processes;
- Improvement of the activities related to the fulfilment of the requirements of ISO/IEC 17043 and the PT Quality Management System;
- Provision of required resources (summarize actions related to adequacy of resources and other relevant factors); and
- Any need for changes.

Form 7: Examples of Proficiency Test 4-Year Plan and History/Log

Part A, 4-Year Plan

This table is an example 4-Year PT Plan.

At the RMAP, each participating laboratory should ensure its required PTs are included in the RMAP plans to cover its laboratory’s scope to ensure proficiency in each area of calibration (as applicable/practical). Most PT plans are organized and planned to cover proficiency in every area of testing based on the lab’s scope within a 4-year period. Laboratory PT plans should help determine what type of PT to select and the interval needed per area of testing. If a lab finds that they need a PT/ILC that is lacking in participants, the lab shall reach out to NIST for the conduct of a National PT or may conduct a MiniMAP PT (OWM PT SOP 2) with at least two other laboratories using the OWM PT Plan with approval from the NIST Office of Weights and Measures. Coordination of extra MiniMAP PTs can be done outside the annual RMAP training and PT planning process.

Proficiency Testing Plan

Laboratory Name

Laboratory Address

Date Generated:

Plan Developed by:

Measurement Parameter	Year-1	Year-2	Year-3	Year-4
Echelon III				
25 kg to 1 mg				
8 oz to 0.03125 oz				
Echelon II				
25 kg to 1 mg				
8 oz to 0.03125 oz				
Volume				
5 gal				
100 gal				

PT
Plan

Summary Schedule for Coverage of Scope:

Part B, Laboratory History/Log:

This table is an example that laboratories can use to track PT participation and results. It can also be used to summarize the PT follow up forms. According to ISO/IEC 17025 and NIST Handbook 143, laboratories are required to track the history of PT participation by staff and may already have standardized forms to maintain this information.

Field	Year	PT Number	Status	Results	Participant Name
Echelon III					
25 kg to 1 mg					
8 oz to 0.03125 oz					
Echelon II					
25 kg to 1 mg					
8 oz to 0.03125 oz					
Volume Tran					
5 gal					
100 gal					

Summary Schedule for Coverage of Scope:

Note:

Status: Scheduled/Active/Complete/Cancel

Results: Pass/Fail