

Materials Testing Advisory Committee (MTAC) Meeting Summary
Saturday April 4, 2009, 8:00 AM

Ray Schiltz – Committee Chairman
John Knicely – Vice Chairman
Steve Medellin – A2LA Recording Secretary

Sheraton Columbia Hotel

Attendees: Please reference the attendance list (see database generated MTAC list) located on the web

1. Introductions:

Ray Schiltz welcomed all members and participants to the annual meeting of the A2LA Material Testing Advisory Committee. He formally passed on his duties to John Knicely the next Chair of the MTAC.

All members and participants introduced themselves and gave a brief description of their professional backgrounds.

2. Ballot for Vice Chairman for 2010

Bob Lambert was voted the 2010 Vice Chairman with all in attendance in favor.

3. Agenda

Motion #1 to accept agenda as submitted, voted all in favor by voice vote.

Comment made that a presentation on Calibration Certificates presented by Pam Wright should be added to the agenda. A2LA staff responded that Pam Wright was scheduled to conduct this presentation at the Sunday April 5, 2009 Assessors Committee Meeting.

4. Last Year's Minutes – Review and Approve:

Motion #2 to approve last years minutes made by Steve Steiro

Seconded by Fred Fetterolf

All in favor by voice vote

5. MTAC Meeting Attendance

All members were asked to review and sign A2LA form A502 – A2LA Duty of Loyalty/Conflict of Interest Policy.

All members were reminded that attendance at the meetings is mandatory to remain a member of the committee.

6. **Status of Action Items from 2008 Meeting:**

Action Item 1 – Adam Gouker completed his review of the MTAC membership list and has updated membership where needed. This review/update will occur after every meeting. (Ongoing)

Action Item 2 – NIST was contacted to obtain information on Charpy Impact Proficiency Testing to provide to labs. In response, NIST will be giving a presentation during this meeting. See Item 9. (Closed)

Action Item 3 – Closed

Action Item 4 – Should A2LA remove the blackened N/A section from the PT checklist?

Removal of blackened N/A sections from all checklists is currently being considered by A2LA Staff. Further information will be provided if/when a decision is made.

A2LA recording secretary, Steve Medellin, commented that, even if commercial PT is not available, the lab must still have a plan.

It was suggested that we ask for a procedure that includes a plan rather than a plan, because otherwise assessors find a lab with a plan with many footnotes at the end of their schedule. A committee member suggested rewording A2LA document R103: General Requirements – Proficiency Testing for ISO-IEC 17025 Laboratories to more clearly request a procedure that includes the eluded to footnotes.

Action Item 5-Closed

Action Item 6 – Flammability Testing – Category Updates (See Attachment 1)

SAE J369: An assessor had indicated this was a category IV during an assessment and wrote a deficiency against the lab for not having an uncertainty budget. The lab argued that the testing they conducted fell under Category I and, therefore, did not need an uncertainty budget.

The question was raised as to what category Flammability Testing (FMVSS 302, SAE J369, GM9070P) fell into.

Consensus of the Committee was that the above testing could still be considered either a category I or IV and that this depended on the materials being used. It was decided that these methods are to remain Category I or IV. (Closed)

Action Item 7 – ASTM D297 section 16.3 was updated to a category IV test in the A2LA document P103a. (Closed)

Action Item 8 – ASTM A428 was updated to a category II test in the A2LA document P103a. (Closed)

Action Item 9 – The question was raised as to what is the difference between a test method and a material specification?

One member offered that a material specification only listed use ranges and settings. However, the point was made that many material specifications include sample preparation procedures and test methods that could be listed on a scope.

Decision: If a test method is written within a material specification, that specific section must be noted on the Scope of Accreditation; the lab cannot be accredited to the entire specification.

One member asked if a lab could be accredited to a practice or guide. Answer: Yes, if it is in support of a method on the laboratory's scope.

Failure Analysis –

It was argued that it is not a specification or a test method, but should be left on the scope as a test. Another member added that it describes the processes that a lab needed to take to reach a conclusion and should be left as a test. It was decided to leave it as a test. The argument was made that the lab needed to have their own protocol on how they determine Failure Analysis for it to remain on their scope.

Action Item 10 – The A2LA Ad Policy has been reviewed and condensed where possible.

Issue raised by Steve Medellin Re A2LA Ad Policy P101 section 13.1 and 13.2 – A2LA is seeing both of these sections marked as N/A however, this cannot be. One of these sections needs to be marked as 'yes.' Whether the laboratory uses the 'A2LA accredited' symbol or not, per A2LA P101 section 13.1 and 13.2, they must always perform accredited testing for tests listed on their scope unless the customer does not want or need it. If a customer requests performance of a test or calibration that appears on a laboratory's A2LA Scope of Accreditation but does not want or need the test or calibration to be performed under accredited conditions, these requests and the exceptions to the accreditation requirements must be clearly documented in the accredited laboratory's contract review records (reference ISO/IEC 17025, Section 4.4.1a). When these tests or calibrations are not performed in accordance with all of the A2LA requirements for accreditation, the resulting test report or calibration certificate cannot be endorsed with the "A2LA Accredited" symbol.

The committee asked how assessors were to determine this.

Response: The assessor must review the contract review records to verify the requests and exceptions to the accreditation requirements are being clearly documented in the accredited laboratory's contract review. If this information is not in the contract review, then it is assumed that the testing has been done under accredited conditions and

therefore all accreditation requirements are applicable to the lab and assessable by the assessor.

Action Item 11 – A2LA procedure has been updated to include the forwarding of all A2LA checklists to the labs prior to their on-site assessments. (Closed)

Action Item 12 – A presentation on FMVSS 302 Flammability will be given as part of today's meeting. See Item 15. (Closed)

Action Item 13 - Present the interpretation that T9 requirements are not applicable to Instrumental Chemistry to the A2LA Criteria Council. Per discussion below, an update on the CC vote is to be provided to the MTAC.

The argument was made that taking a reference material and characterizing a piece of equipment (standardizing) isn't the same as a calibration. This is going to the CC for vote. The CC initially voted that, for instruments such as GC, a characterization is a calibration.

7. **NEW ACTION ITEM #1– Which A2LA normative documents need to be on a laboratory's master list (i.e. need to be controlled)? Recommend staff compile this list, make it available to assessors and laboratories and post it on the A2LA web site.**

Post Meeting Note: This action item has already been addressed by A2LA staff and a summary of documents that need to be controlled can be found on the A2LA website under the heading understanding ISO/IEC 17025, Section 4.3.1.

8. **Discussion of which test methods could be listed in column 5.9 of the method matrix as QC non-applicable.**

One member brought up the point that ISO/IEC 17025 5.9 states that QC will be conducted for appropriate testing methods only and the member asked what if the laboratory makes the argument that the test method in question isn't appropriate for QC testing. In response the committee discussed whether it was ever appropriate to note N/A for a test method. Steve Medellin identified A2LA's current position that there should always be some form of QC testing for each method. There was a discussion as to whether testing that is Pass/Fail needed a QC check and also some committee members argued that there were test methods for which they thought QC testing was not applicable. (see below new action item).

Also discussed was the apparent misunderstanding by labs of ISO/IEC 17025 section 5.9 and A2LA PT requirements R103. Many members agreed that the A2LA PT document R103 led labs to believe that all testing, PT and QC, needed to be included on their PT plan and had to be conducted within the 4 year period. Steve Medellin clarified that only commercially available PT needed to be conducted within a four year plan; internal QC, per ISO/IEC 17025 section 5.9, is not required to be specifically identified within the Lab's PT plan. The plan must address what the laboratory is doing in lieu of PT for

testing that does not have commercially available PT. This does not need to be a specific reference for each test, but may be a general statement that points to the QC activities that are conducted by the lab. The committee requested that A2LA review their document R103 to further clarify this issue for laboratories. (see below new action item)

Motion #3(by Gene Zerlaut) – A2LA to create a list of all test methods for which QC is not available – seconded by Fred Fetterolf. This motion was discussed and it was agreed that a list of this type would be impractical and nearly impossible to create. However it was agreed that R103 was not clear.

NEW ACTION ITEM #2–A2LA to review document R103 and clarify the A2LA Proficiency Testing requirements as applicable to laboratories that perform QC activities (in lieu of PT) due to unavailability of relevant commercial PT. (T. McInturff; 6/30/09)

9. Presentation –NIST Charpy PT Program

C. McCowan from NIST provided a short presentation on the NIST Charpy PT program outlining their plan to provide QC data online for use by the laboratories. The website would be available to all NIST PT participants and the data provided would be available for download for use by the laboratories. Mr. McCowan then asked the committee what kind of data would be useful to the laboratories, in what format, and what could be included on the website that would be of use.

The committee indicated two areas that would be of use to customers; uncertainties not only for testing results but also for the reference material used and indications of shifts or trends in data. Mr. McCowan responded that currently the uncertainty of the test results is provided in the test reports, but also the test pieces used are tested in house and that they could provide the labs with the uncertainty for their reference material. Also Mr. McCowan stated that NIST would make the data available for customers, but that they would not be plotting trends; this would be left up to the customer.

When asked when this website would be available, Mr. McCowan responded that the website was projected to be completed and available this year.

10. Presentation – Gene Zerlaut presented QC data and outlined QC program in use by several labs for Vibration Testing.

Gene Zerlaut presented interlaboratory comparison QC data and outlined the program developed by one laboratory in regards to resonance, Category IV testing. The main laboratory in this study that developed the QC program is considering whether to offer the artifacts they have developed for sale to other labs for use in QC testing. This may become, with more testing, a viable PT option for this type of test.

Gene Zerlaut commented that variations between instrumentation were noted. One member asked what acceptable variation might be. G. Zerlaut responded that this question would need to be addressed by the manufacturer of the instrumentation in use.

It was argued by one member that ISO/IEC 17025 does not require labs to run QC a set amount and, for this proposed program to work, frequent testing would be needed to show trending. Steve Medellin and Trace McInturff agreed that A2LA could not require a lab to perform a quantity of QC testing, but if the lab could show trending over time, even if over 10 years, that this could be shown to satisfy the requirement of trending.

Gene Zerlaut was asked what other methods are available for QC testing resonance? He indicated that a 'cantelever rod' and 'optical wedge' were also in use by some labs.

One member suggested the use of accelerometers to perform QC checks as these are used by some labs. Gene Zerlaut commented that this was not effective as labs using the accelerometers could not get node results within the workable range used by the lab and that there was a need to develop QC programs that could test within a lab's workable range.

11. ASTM E23:

It was noted by a committee member that Chavez Charpy samples are being used for internal verifications; however Chavez has not been approved as a reference material provider. Also the member commented that the standard did not thoroughly address whether verification is needed whenever the striker is replaced and that some labs are using this wordage to verify after the striker is replaced rather than before. This, the member argued, allowed the lab to maintain in-range verification, but was not properly ascertaining the functionality of the instrument at the end of a testing cycle as it did not verify the performance of the striker that was in use prior to the change.

The representative from NIST, Mr. McCowan, informed the committee that wording related to the changing of strikers was added to ASTM E23 because it was noted that some laboratories were doing this to perform testing that required different strikers. Mr. McCowan informed the committee that, as long as the lab had a strong internal procedure and that they perform internal trending with internal samples to show that their instrumentation is working properly, it should be sufficient to the auditor to be in compliance with ISO 17025.

12. ASTM B117

It was pointed out that while many labs listed ASTM B117 on their scope, the laboratories were not carrying out all of the testing identified in the standard. The argument was made that, if a lab only performed, for example, pass/fail salt spray testing, this needed to be indicated by the ASTM B117 listing on their scope. The committee was in agreement that listings of ASTM B117 on Scopes needed to be followed by a notation of what testing was being performed.

A comment was made that, if there is no weight loss (for fastener labs, for example), the labs need not participate in NET.

Steve Medellin pointed out that for Hardness Testing, assessors must be identifying on the laboratory's Scope, what scales and loads (where various loads could be used on the same scale) are being used.

13. Dimensional Testing on Scope

The question was asked whether the applicable test methods be listed on the scope along with the parameters, ranges, measurement uncertainty, and equipment. Some members agreed, arguing that some dimensional testing is method specific, an example being fasteners and that, in these cases, the test method should be indicated on the scope.

Many members voiced their concern regarding the lack of test methods on scopes for calibration laboratories. It was argued that calibration laboratories were being accredited to calibrate for parameters like force and Brinell hardness, but were not being required to list the test methods being used to perform those calibrations. The issue being that, without a listed test method, calibration assessors could not determine if measurement uncertainty for these calibrations was being determined accurately per the applicable test method.

It appears that calibration laboratories are being assessed by some calibration assessors that do not ensure that the laboratories have the ability to perform calibrations in accordance with the required methods, such as ASTM E4 and E18, or that the laboratories have appropriately small uncertainties. The example of an inappropriate uncertainty was a laboratory that was accredited with a Rockwell uncertainty that was more than twice the range of the tolerance, this was red flagged and the laboratory was again accredited with the same uncertainty.

In response many argued that the testing labs needed to be specific when requesting their calibrations, identifying the test method to which the instrument should be calibrated.

MOTION #4(by Steve Steiro) – The MTAC recommends to the CC that, where applicable, the calibration method be listed on calibration scopes of accreditation – where there are specific international or consensus test methods for the specifications. Seconded by Doug Berg

Post Meeting Note: Prior to this meeting, this issue was captured as a formal “complaint” within the A2LA system. Input was sought from the MTAC at this meeting and will be provided to and discussed within the Measurement Advisory Committee at their next teleconference. Feedback from all interested Advisory Committees will be taken into consideration when determining how to address the “complaint”.

14. ASTM D1505, section 7.2

This discussion concerned the test method requirement of calibrated beads. It was identified that there is no accredited source or vendor for these beads and that those laboratories that wished to purchase beads needed to either calibrate in-house or request an exception with traceability.

One member suggested a method for in-house calibration that used a pycnometer to measure bead density however; the lab would need to satisfy all elements of T9 to do this.

The suggestion was made that the committee accept PT testing for ASTM 1505 for the gradient method in lieu of traceability. Gene Zerlaut added that, if the committee was to consider this, the laboratory would need to perform the PT at a set frequency. This PT is available twice per year and the suggestion was made that the frequency be set at twice a year. (see below motion)

MOTION #5(by Steve Steiro) – The MTAC recommends to the Criteria Council that PT results be accepted in lieu of traceability for density beads, as long as the laboratory participates at the frequency at which the PT is offered. Currently it is being offered by CTS at a frequency of 4 times per year. Seconded by Robert Lambert.

15. Presentation - FMVSS 302

Please refer to Attachment 1 for more details on this presentation.

A presentation was given by Robert Holcombe and Dan Fritz on Federal Motor Vehicle Standard 302. This presentation included a brief outline of the test procedure, equivalent and nonequivalent test standards, and an outline of critical elements that can affect test results that should be verified by assessors as being in compliance with the test method.

Discussion by the committee of the specification FMVSS 302 indicated that assessors should audit laboratories to all the test methods listed on their scope or included in test reports even if FMVSS 302 is the lab's reference document.

In regards to PT testing, the committee commented that interlaboratory studies should show several materials with differing burn rates. Interlaboratory studies with all "0" (meaning no burn) do not demonstrate proficiency.

16. Color Testing

The committee discussed the fact that NMIs do not carry or offer traceable reference samples and accredited calibration providers aren't available. Three approaches to this problem were discussed:

- i. Do not require traceability as long as the lab participates (successfully) in PT testing.
- ii. Inquire to the OEM as to their stance on this issue and possibly obtain a one-time blanket ok for this problem that can be passed to assessors.
- iii. Table the issue to be revisited later - X-Rite has recently been accredited to calibrate their own equipment and can do this with traceability to an NMI using white tiles and another OEM has voiced their desire to do the same. It was suggested by a member that this might put pressure on other labs to get accredited to perform their own in-house calibrations as well.

MOTION #6 (by Charles Gortekowski) - Table this issue for the time being and see if more labs get accredited in the future to perform their own internal calibrations. Seconded by Robert Lambert.

17. Notification – Captive labs must comply with ISO/IEC 17025 section 4.4.2.

All committee members were in agreement, however all voiced the concern that application was an issue. Was a captive lab required to show contract review for every instance of requested testing between the captive lab and the larger company system? The committee consensus was that there needed to be an internal method that covered this, i.e. internal work orders or a process control plan that outlined the arrangement and conditions of such.

A2LA's application requires that all laboratories meet this clause, regardless of whether their customers are internal or external. However, a record for every single measurement being conducted for the customer is not required. This review can be performed in a simplified way; for example, an initial review to confirm what measurements are needed on the routine basis for a particular customer and/or submitted item. Assuming nothing changes, then that initial review would satisfy the requirement.

18. Traceability for magnetic permeability indicators

Severn Engineering now owns what were the NIST standards for low Mu permeability and all low Mu calibrations in the United States must be traceable to these standards. As such, there is no possibility of traceability of Severn Gages (back to NIST).

MOTION #7 (by Fred Fetterolf) – This body recommends to the CC that A2LA approve a blanket waiver for all laboratories for the traceability of the Severn Gage. Seconded by Steve Steiro.

19. ASTM Notes and Appendices

Please refer to Attachment 2 for more details on this presentation.

Gary Cornell presented a review of what ASTM Notes and Appendices are and how to understand them. This discussion included a short review on how to determine the current revision date of an ASTM standard and interpreting an ASTM and ISO standard. He also noted that, per the general laboratory requirements (R101), laboratories are given one year from the date the new standard is published to update their procedures with the new standard.

20. A2LA document P103a Measurement Uncertainty Annex

A) Should ASTM B209 be category II or III?

No member felt informed enough to comment on this.

B) Should Dimensional testing be listed in its own category?

The committee felt this issue had already been addressed and no changes were needed.

C) Should SAE J369, FMVSS 302, GM9070P be identified as category II?

The above test methods should remain as category I or IV.

21. No revisions to the MTAC bylaws proposed.

22. Notification – Instron calibrator and manufacturer of the Dynatup instrument – this particular Instron lab is not accredited to perform this calibration and their calibration certificate is misleading.

The Dynatups require dynamic load cells for calibration. Instron is issuing calibration certificates for Dynatups, but they are only accredited for static load cells not dynamic load cells. Laboratories with Dynatup instruments will need to provide traceability and apply for an exception to the traceability policy.

23. Guide 65 Assessors Needed for WaterSense Program

Gene Zerlaut volunteered to help with new Guide 65 assessor work for the WaterSense Program.

24. NDT Special Requirements

Please refer to Attachment 3 for more details on this presentation.

Chuck Gortakowski provided information on NAS 410 – special training requirements. NAS 410 is included on several ASTM test methods including ASTM E1742, E1444, and

B244 and requires specific training requirements that should be examined during on-site assessments for compliance. It was pointed out that other methods are referenced, but all list similar training requirements.

In regards to NAS 410, a concern was raised that NADCAP was imposing their requirements.

25. ISO/IEC 17025 section 4.14.1

A question was raised concerning internal audits - Is a laboratory required to review all testing activities on their scope of accreditation during each audit? It was clarified that the laboratory did not have to cover all testing in each audit, but must have a predetermined schedule to ensure that all testing is being audited over a defined period of time. It was noted that the standard only states that they need to audit all 'elements' and that this may or may not be interpreted as observing testing. This application of the standard is also included on our web site, <http://a2la.org/faq/faqfinder170252005.cfm>, Understanding ISO/IEC 17025:2005, Section 4.14: *"It is also important to note that the standard requires auditing all "testing and/or calibration activities", not necessarily all testing and/or calibration methods. For some laboratories, auditing all accredited technologies and/or parameters may constitute a sufficiently thorough and comprehensive audit of their accredited activities, such that auditing all methods (which may be redundant and overlap) may not be necessary - as long as there is no evidence or indication that the depth and expanse of the technical portion of their audit is inadequate."*

26. Adjourn MTAC Meeting

MOTION #8 (by Ray Schiltz), seconded by all in voice vote

Summary prepared by Karin Athanas and Aruna Kaveeshwar, A2LA Accreditation Officers.

ATTENDEES

Meeting of the Materials Testing Advisory Committee April 4, 2009

Athanas, Karin	A2LA Staff
Berg, Douglas	A2LA Assessor
Berg, Nancy	
Bower, David	A2LA Assessor
Bussey, Marlin	Inactive A2LA Assessor
Cheng, Justing	A2LA Assessor
Combs, Terry	A2LA Assessor
Cornell, Gary	A2LA Assessor
Daniels, Charles	A2LA Assessor
DiGirolamo, Larry	A2LA Assessor
Doggart, Tom	A2LA Assessor
Fetterolf, Fred	A2LA Assessor
Flinchbaugh, Dean	A2LA Assessor
Foncannon, Nancy	A2LA Assessor
Gavin, Diana	A2LA Staff
Gortakowski, Chuck	A2LA Assessor
Heberling, David	Assessor
Holcombe, Robert	A2LA Assessor
Inderrieden, Bill	A2LA Member
Johnson, Sandy	ExxonMobil Chemical
Kaveeshwar, Aruna	A2LA Staff
Kinsella, John	A2LA Assessor
Klein, Alex	ArcelorMittal - Indiana Harbor
Knicely, John	A2LA Assessor
Kyle, Philip	MVA Scientific Consultants
Lambert, Robert	A2LA Assessor
Lentz, Doug	A2LA Assessor
Lerman, Steve	A2LA Assessor
Liu, Billy	A2LA Assessor
Lutze, Frank	A2LA Assessor
McCowan, Chris	NIST
McCully, Dennis	A2LA Assessor
Medellin, Steve	A2LA Staff
Miller, Rob	A2LA Staff
Norris, Janet	A2LA Assessor
Peverill, William	A2LA Assessor
Ruiz, Cathy	BASF Corporation
Schiltz, Ray	A2LA Assessor
Steiro, Steve	A2LA Assessor

Weitzel, Sara
Zerlaut, Gene

A2LA Staff
A2LA Assessor

Total Number of Attendees: 41