



American  
Association  
for Laboratory  
Accreditation



**A2LA News:** The Newsletter of the American Association for Laboratory Accreditation\_\_ February 2002, Number 78

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### 2002 Annual Meeting

A2LA's 2002 Annual Meeting will be held on Monday morning, March 11. For the third consecutive year, the Sheraton Columbia Inn, in Columbia, MD, will be the meeting site. The Annual Meeting is free of charge, but space is limited and reservations are required. So, make your plans now to attend this event, which is open to all A2LA members, volunteers, assessors and representatives of A2LA-accredited laboratories. For more information, please contact Ms. Berta Hakes at [bhakes@a2la.org](mailto:bhakes@a2la.org).

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### Advertising Policy Revised

A revised A2LA advertising policy that will take effect on April 30, 2002 has important implications for all A2LA-accredited laboratories. The major revision of the document, [Laboratory Reference to A2LA Accredited Status - A2LA Advertising Policy](#), was approved by the A2LA Board of Directors last year and was sent to all web subscribers, assessors, and volunteers in late November 2001. The new policy is based mainly on ILAC-G14: 2000, *Guidelines for the Use of Accreditation Body Logos and for Claims of Accreditation Status*. All laboratory representatives are urged to pay particular attention to the following significant changes to the current advertising policy:

- Accredited laboratories will no longer be permitted to use the logo or include reference to A2LA accreditation on reports or certificates when **none** of the tests or calibrations included on the report or certificate are covered under the accreditation. In the past, laboratories could include the logo or reference to accreditation in such cases as long as a disclaimer was included to specify that the tests/calibrations in question were not covered under the accreditation.
- Accredited laboratories must have a policy and procedure for controlling the use of the term "A2LA" and the "A2LA Accredited" logo. The policy and procedure must be consistent with the new advertising policy requirements. To review the full document and all the changes, please visit the A2LA web site, [www.a2la.org](http://www.a2la.org).

Why was the policy revised? During the past two years, reliance on A2LA accreditation has increased and, unfortunately, so has misuse of the A2LA logo and misrepresentations of accredited status, especially in the calibration area. Many clients are finding out, after the fact, that reports or certificates received from an accredited laboratory do not satisfy the requirements of accreditation and do not comply with the [A2LA Policy on Measurement Traceability](#). The result is increased costs to have tests or calibrations repeated and unhappy clients whose trust in accreditation has been betrayed.

Therefore, accredited laboratories must describe the limits of their accreditation accurately, in a manner that does not imply accreditation in areas outside their scope of accreditation or, in the case of

multi-site laboratories, for facilities not accredited by A2LA.

Only test or calibration reports bearing the A2LA logo can benefit from the acceptance established through mutual recognition arrangements among accreditation bodies, and calibration reports issued by A2LA accredited laboratories must bear the A2LA logo in order to meet the [A2LA Policy on Measurement Traceability](#). This means that when using an accredited calibration laboratory, you must ensure that the lab is accredited for the calibration in question (refer to the calibration laboratory's Scope of Accreditation) and you must select the accredited services offered by the calibration laboratory.

Ethical protocols, concern for your clients, and the dictates of the accreditation-body mutual recognition arrangements in which A2LA participates require A2LA to enforce these new policies assiduously. Misrepresentation of accredited status may lead to suspension of accreditation.

If you have questions about A2LA's advertising policy, please contact A2LA Quality Manager, Ramona Saar at (301) 644 3201 or via e-mail at [rsaar@a2la.org](mailto:rsaar@a2la.org).

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## Summary of the October 2001 Board of Directors Meeting

At its October, 2001 meeting, the A2LA Board of Directors tackled an ambitious agenda and made a number of important decisions.

- It approved revisions to the [A2LA's Advertising Policy](#) and the [ISO/IEC 17025 Transition Plan](#). (See articles elsewhere in this issue of A2LA News.)
- It approved the 2002 operating budget.
- It approved six new Accreditation Council members: Chuck Blank (EMC and Calibration), Harry Moody (Calibration), Ray Kletke (Calibration), Dave Lorenzen (Calibration), Bill Sorrells (Calibration), and Michael Tedaldi (EMC).
- It approved a revision to the "A2LA Conditions for Accreditation" which specifies the time frame (**30 days**) within which accredited laboratories must provide written notice to A2LA headquarters of changes in any aspect of the laboratory's status or operation that affects the laboratory's legal, commercial or organizational status.
- It decided that the expenses related to assessors' "long travel delays" should not be borne by the lab/customer. Instead, A2LA will pay for the assessor's expenses (but not time) related to the delay. (See article on Financial Services News).

Finally, the A2LA Board extended thanks to four departing Board members for their dedication and service to A2LA. They are Dean Flinchbaugh (A2LA Business Committee Chairman and Board member for the past nine years); Steve Watson, (A2LA Board Secretary and Board member for the past eight years); Pat Toner (Board member for the past nine years); and Beverly Jones (Board member for the past two years).

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## Exceptions to the Traceability Policy

There are exceptions to every rule, including a policy with which all accredited laboratories should now be familiar: the [A2LA Policy on Measurement Traceability](#). As is well known, A2LA requires that accredited laboratories obtain their calibrations either directly from a National Metrology Institute or use a calibration laboratory that is accredited either by A2LA or one of its many mutual recognition arrangement (MRA) partners.

When using an accredited laboratory, the lab must ensure that the calibration laboratory's Scope of Accreditation includes the calibrations in question and that the calibration laboratory can make measurements to the level of accuracy required for the specific equipment/standards. Assessors are required to cite a deficiency if the laboratory personnel do not demonstrate compliance with the traceability policy. To resolve the deficiency, the laboratory personnel must then provide evidence of compliance.

However, A2LA headquarters will consider granting an exception to the traceability policy requirement in cases where compliance is not possible. The following are examples of such cases and of the information the applicant for an exception needs to provide to A2LA staff.

### Case 1

You have searched the A2LA web site for an accredited calibration laboratory and cannot find one for the calibration in question. You have also searched unsuccessfully for labs accredited by our MRA partners (on the NVLAP web site, for example). Your corrective action response to A2LA headquarters would have to include both a request for an exception and evidence of the results of your unsuccessful searches for a qualified calibration laboratory.

**Case 2**

The calibration service provider, although not properly accredited, is approved by the original equipment manufacturer (OEM) and authorized to make adjustments to the equipment, and there are no accredited OEM-approved vendors available. Your submission to A2LA, in this case, would have to include a request for an exception, a copy of the OEM-vendor contract, and evidence of your unsuccessful searches to locate an accredited OEM-approved vendor.

**Case 3**

Your laboratory is required by a higher authority (state law or military requirements, for example) to use a specific calibration laboratory that is not properly accredited. Along with your request for an exception, you would be expected to submit citation of the applicable law or requirements and any additional information that supports your request.

**Case 4**

You wish to use a State Weights and Measure lab that is not currently accredited by A2LA, NVLAP or another MRA partner. A2LA will consider granting an exception allowing use of this lab if it is currently recognized by the NIST Office of Weights and Measures (OWM) State Laboratory Program. (This program is specifically designed to verify traceability of measurements.) Here, your first step would be to ensure that the laboratory's scope (issued by the OWM) covers your calibration needs. Then you would want to provide A2LA, along with the exception request, a copy of the laboratory's current OWM Certificate and Scope. One caveat: every year, by approximately April 1, the NIST OWM publishes on its web site a list of State laboratories that have lost their OWM recognition.

Therefore, you would need to refer to that site (<http://www.nist.gov/labmetrology>) to ascertain the current status of a State laboratory's recognition, as well as to view information about the OWM program criteria. If you needed recognition information before the 2002 "de-listings" were posted, you could contact the laboratory directly for a copy of its Certificate and Scope, or contact Georgia Harris at the OWM for information about a specific laboratory (phone - 301 975 4014, e-mail: [gharris@nist.gov](mailto:gharris@nist.gov)).

In all of these cases, the assessor is required to cite a deficiency during the assessment, because assessors are not empowered to make decisions on exceptions to the A2LA Policy on Measurement Traceability. Note also that A2LA does not consider any increased cost or inconvenience that you would incur in order to comply with the A2LA policy to be justification for granting an exception.

For additional information, see the document entitled, "[Exceptions to the Traceability Policy](#)".

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## A2LA Hosts Calibration Assessor Meeting

A2LA calibration assessors attended a one-day brainstorming session at A2LA headquarters in Frederick, MD, last November 17. The meeting's objectives were:

- To identify ways to reduce assessor variability during assessments.
- To improve the format of the Scopes of Accreditation.
- To obtain assessors' comments on a measurement uncertainty guidance document being developed by staff. (It is hoped that that the finished guidance document will be made available to laboratories by the end of 2002.)

The assessors also discussed the importance of ensuring that laboratories submit complete [uncertainty budgets](#) with their application and suggested that A2LA explain to laboratories why uncertainty budgets are important.

The next meeting of calibration assessors will be held on March 9, 2002 in Columbia, MD.

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## Calibration Guidance Documents

Are you looking for calibration guidance documents? One source is the web site for the European Cooperation for Laboratory Accreditation (EA) ([www.european-accreditation.org](http://www.european-accreditation.org)). Click on the "Documents" link and, in the EA-10 series, you'll find a number of guidance documents specific to calibration. Here is partial list of documents recently posted:

- EA-10/11 - Calibration of Temperature Indicators and Simulators by Electrical Simulation and Measurement

- EA-10/12 - Evaluation of Vector Network Analyzers (VNA)
- EA-10/13 - Calibration of Temperature Block Calibrators
- EA-10/14 - Calibration of Static Torque Measuring Devices
- EA-10/15 - Calibration of Digital Multi-meters
- EA-10/16 - Estimation of Uncertainty in Hardness Measurements

All these documents include information on measurement uncertainty.

As with all guidance documents, the technical information provided should be carefully considered before making any changes to your own calibration procedures.

If you know of any other sources of calibration guidance documents, please pass the information along to A2LA so we can share it with our readers.

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### **Accredited Lab Plays Major Role in Winter Olympics**

The UCLA Olympic Analytical Laboratory, located in Los Angeles, California, is accredited by A2LA to perform a number of toxicology and pharmacology studies on human urine. The laboratory, which has established a temporary local site testing facility in Salt Lake City, Utah, is now playing a major role at the 2002 Winter Olympic Games, as the official drug residue analysis laboratory.

Mr. Ryan Connolly, the Director of Administration for the laboratory, recently provided A2LA with the history of the temporary facility.

Early in the planning stages for the Winter Olympics, the Salt Lake City Organizing Committee selected the laboratory and agreed to rent space in a location just northwest of the University of Utah. While in the process of planning the new facility, and with only seven months to go before the opening ceremonies, the International Olympic Committee (IOC) informed the laboratory personnel that the temporary facility would need to be accredited to ISO/IEC 17025. After the equipment was set up and the lab's technicians and analysts were brought in from L.A., the temporary lab was assessed by an A2LA technical expert. The laboratory achieved A2LA accreditation in January, 2002.

The lab is capable of performing a variety of different tests in order to determine if banned substances are being used by athletes. Urine samples are collected after the conclusion of each event. Two urine samples are taken from the top four finishers in each event and from two athletes selected randomly. One of the samples is tested and the second is retained just in case additional testing is needed. Because most of the events take place in the afternoon, the laboratory does most of its work in the late evening and into the early hours of the morning.

If a positive result is obtained as a result of testing the urine samples, the laboratory must notify the IOC Medical Commission, which then follows up with an investigation. The investigation may lead to stripping a winning athlete of a medal. The process is complicated, controversial, and fast - usually taking place within 24 hours. It involves legal counsel and retesting of samples. Since credibility of the laboratory may be questioned, it is imperative that the laboratory demonstrate its technical competency through the process of accreditation.

The temporary laboratory accepted its first "real" samples from athletes on January 30, 2002, when the Olympic Village opened and will operate through February 27, 2002. The laboratory will then be dismantled.

The UCLA Olympic Analytical Laboratory was also selected to run the drug tests for the Paralympics following the main Games- but the International Olympic Committee has agreed to allow those samples to be tested at the main facility in Los Angeles.

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### **News from Financial Services**

- In 2002, the IRS mileage rate for privately owned vehicles has increased to \$0.365 per mile.
- At its October 2001, Board of Directors meeting, a Board task group reported on the results of its study of the current A2LA assessor travel compensation policy. The report stated that the compensation must be based on the principles of fairness, competitiveness, and shared risk (between A2LA, assessors and laboratories). Subsequently, the Board reaffirmed the current formula for calculating assessor reimbursable travel time to and from laboratories: "the total number of hours traveled less two hours and divided by two."
- Also, at the October meeting, Board members agreed that the expenses related to 'long delays' - that is, delays that result in the assessor having to spend one or more extra nights at a hotel due to a flight delay/cancellation - should not be passed to the lab/customer. When such a delay occurs, A2LA will pay for the assessor's expenses (but not time) related to the delay.
- A2LA continues to accept MasterCard and Visa payments for membership dues, training invoices,

accreditation fees, etc. Please contact Teresa McCarthy at (301) 644-3229 or [tmccarthy@a2la.org](mailto:tmccarthy@a2la.org) if you would like to make a credit-card payment.

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## Understanding Management Review and Internal Audit Requirements

Management review and internal audit requirements (clauses 4.13 and 4.14) of ISO/IEC 17025 are often misunderstood by laboratories seeking initial accreditation.

Help is available. The Asia Pacific Laboratory Accreditation Cooperation (APLAC) Technical Committee publishes two documents that cover these topics in detail.

- [APLAC TC002 - Internal Audits for Laboratories](#): This publication provides guidance to laboratories on how to develop an internal audit program.
- [APLAC TC003 - Management Reviews for Laboratories](#): This publication covers the objectives of a management review and provides guidance on planning, implementing and recording management reviews that comply with the dictates of ISO/IEC 17025.

Both guidance documents are highly recommended to laboratories seeking A2LA accreditation. They are available free of charge at the APLAC web site, [www.aplac.org](http://www.aplac.org).

A2LA has been a signatory to the [APLAC Mutual Recognition Arrangement \(MRA\)](#) since 1996 and several A2LA staff members hold leadership positions within APLAC committees. One of the main goals of APLAC is the harmonization of the accreditation processes of all signatory accreditation bodies. The APLAC guidance documents not only assist laboratories seeking accreditation, but also help to ensure the uniformity of the assessments performed by the many accreditation bodies from Asia-Pacific nations that are signatories to the MRA. To learn more about APLAC, please visit its web site.

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## Web Site Updates

We are pleased to announce that the searchable database on the A2LA web site is complete. You can now search the Scopes of Accreditation of **all** the A2LA accredited laboratories. Simply click on the link "[Looking for an Accredited Lab?](#)", enter your search criteria, and then select the links to the scopes (in pdf format) that you are interested in reading.

We have also added to our web site a new link entitled "[Helpful Guidance Documents](#)" and have included a link to [Greg Gogate's paper on software validation](#). Please feel free to share this document with anyone interested in understanding software validation.

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## Profile of Dick Turner

A refreshing sense of humor and a down-to-earth manner. That's the impression you take away from an hour's conversation with Dick Turner, of Vancouver, British Columbia. Then you reflect on the man's credentials and accomplishments and you realize: he may not take himself seriously, but he certainly takes his work seriously. In fact, when it comes to sober pursuits like accreditation and measurement uncertainty, he's world class.

**First the humor.** Here's Dick thumbnail sketch of his life:

"Born in England many years ago. Sentenced for exceptional behavior to six years education in an 11th century monastery building known famously as Oxford University . Very cold and damp. Did a bit of physics in between playing soccer, which took up a lot of time.

"Subsequently spent 10 years in Ottawa, Canada, getting clothes dry and feet warm in a luxury basement apartment. An inadvertent excursion to the outside world on a winter day confirmed the inferiority of the Ottawa climate and resulted in immediate departure to South Africa.

"Ran the South African national metrology laboratory (a pale imitation of NIST) for the next 23 years with no money but high relevancy. Initiated South African laboratory accreditation (the National Calibration Service, NCS) in 1980 and left it as CEO in 1996, at which time it had 140 accredited calibration labs.

"During all that period had an overabundant interest in estimating uncertainties and promulgated own document of five pages on the subject for compulsory use by the NCS accredited laboratories. The document expounded the doctrine that if it's uncertain it

should be easy to estimate, so don't waste too much time on it.

"Took pity on Canada and returned in 1996, but to an apparently more hospitable part - just as far west from Toronto as one can get. Now residing north of Seattle and back to the wet; but at least free from snow at most times. Retired.

"In 1997 was discovered by A2LA to be unemployed and being a nuisance to the Canadian laboratory accreditation body by implying that 16 accredited calibration laboratories was rather few. In that year was reincarnated as the world's savior from uncertainty and preached a gospel of salvation from the GUM at the A2LA conclave.

"Saved America in one afternoon and prevailed on Daren Valentine to allow general dissemination of the SSU (Simple Simon Uncertainties) course to all and sundry. This course has reached astronomical heights of popularity due to the inclusion of a Punch-and-Judy act which takes up most of the first one-and-a-half days of the course. {The course is scheduled for two days but usually finishes shortly after Judy can't take any more of it.)

"Can more be achieved? One would think so. A very ambitious project with two major goals has been initiated, namely - 1. To teach America to make tea properly. 2. To prevent the self-destruction of America by noise."

The humor is a cover for an outstanding scientist and a true pioneer in laboratory accreditation. Here are some of the serious details of Dick Turner's life.

**Education and early career.** He obtained his B.A. and Ph.D. from Oxford, specializing in a sphere of physics akin to nuclear physics. He chafed under the austere conditions of his life in England and was pleased to get a post-doctoral fellowship from the National Research Council of Canada. At NRC, he immersed himself in very basic research with a goal of becoming "the guy who invented the first laser" but lost the race to the scientists at Bell Labs.

**Emigration to his adopted country, South Africa.** Dick published articles about his laser research in the prestigious Physical Review. As a result, a colleague from his Oxford days invited him to come to South Africa for three months to help build a laser (he got the job done). In the course of the project, Dick fell in love with South Africa; he and his family would spend the next 25 years there. He took a position as the head of the Precise Physical Measurement Division (PPMD) of the Council for Industrial Research (CSIR), in Praetoria, where he had "hands-on" responsibility for maintaining the national measurement standards. "I had a free hand to do what I liked, as long as it didn't cost anything."

**Leaving behind basic research.** What Dick had come to realize was that he liked applied research and working with industry more than basic "ivory-tower" research. He was disillusioned with the latter field where he experienced little responsibility and little accountability. "The major rule in life was to produce papers and travel to meetings in nice places." This shift of focus led him to "look for ways to make our laboratory relevant." One way was accreditation.

**An accreditation pioneer.** Dick established the CSIR's National Calibration Service (NCS) in 1980 as an accreditation program for calibration laboratories; by 1993, NCS had accredited 140 laboratories. All these laboratories relied on the PPMD lab for their traceability needs. The metrologists at PPMD served as assessors for NCS. Meantime, Dick was busy being relevant. He chaired all 14 technical committees of NCS, took part in many assessments and wrote all the technical documents. He is particularly proud of his text on uncertainties, "written in 1983-84, long before the GUM." Through this accreditation program, "the National Lab interacted with all the scientists in South Africa's industrial community," to the benefit of all. In 1993, the NCS became independent of the CSIR, and Dick Turner became the NCS CEO.

**A "Polecat Country."** Official contacts outside of South Africa were limited, during this period, because, as Dick terms it, "South Africa was a polecat country" (because of Apartheid). "Taiwan was one of the few countries that would speak to us." Dick taught the Taiwanese a lot about measurement science, and they were able then to make great progress. Dick also had good contacts at the National Physics Lab in London. And he became friends with the Vice President of PTB, the German NMI, because the Germans regularly made technical forays into Africa. One of Dick's crowning achievements, in the mid-'90s, was negotiating an MRA between NCS and WECC (now part of EA). NCS became the only national calibration service outside of Europe to enjoy this status.

**Return to Canada - and A2LA.** In 1996, because the increasing civic unrest, Dick Turner left South Africa and followed his two sons and his wife, Barbara (aka "Minnie"), to Canada, intending to retire. However, he found retirement "miserable." So, when Pete Unger invited him to give a short course on measurement uncertainty to the 1997 A2LA Assessor Conclave, he readily accepted the invitation. (Pete had learned about Dick from the head of SANAS (which the NCS had evolved into). Minnie, a retired mathematics professor, taught the course with Dick. Subsequently, Dick and Minnie ("Punch and Judy") have conducted a number of similar training courses for A2LA. In addition, Dick is a leading A2LA lead assessor in the assessment of calibration laboratories.

**Conclusion - his legacy in ILAC.** Dick himself was never active in the International Laboratory Accreditation Cooperation (ILAC), but he has had a significant influence on this global organization. He hired and trained Mike Peet at NCS and, when he was preparing to leave South Africa, he recommended that Mike be appointed his successor. Mike now heads SANAS and is serving as the current Chairman of ILAC. In both roles, he carries forward the sterling legacy of his mentor, Dick Turner.

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## Promoting Your Accreditation

Effectively promoting your laboratory's accreditation to clients and potential clients, using the proper wording, can be a challenge. Recent marketing brochures published by the International Laboratory Accreditation Cooperation (ILAC) will make your job easier.

The ILAC brochures are available free of charge on the [ILAC web site](#). Click on the "Publications" link and scroll down to the links to the pdf documents. The two publications that will be of most use to accredited labs are the following:

- *Why Use an Accredited Laboratory;*
- *The Advantages of Being an Accredited Laboratory.*

A2LA has also placed a link to these documents on our web site. Check out the new "[Promoting Your Accreditation](#)" link at [www.a2la.org](http://www.a2la.org).

If you have any questions related to these documents, please contact A2LA's Technical Manager, Warren Merkel, who participated in the development of the brochures. He can be reached at [wmerkel@a2la.org](mailto:wmerkel@a2la.org).

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## Death of an A2LA Founding Father

Most successful organizations can trace their origins to a handful of "Founding Fathers," men of courage and vision who, in retrospect, seem larger than life. Just before Christmas, Earl H. Hess, one of A2LA's Founding Fathers, passed away; Earl really was larger than life.

Earl Hess died at his home, in Lancaster, PA, the home which had been the family farmhouse where he was born and reared. Today, the house has been modernized and the farm has been replaced by the campus of Lancaster Laboratories, Inc. (LLI), a spacious, state-of-the-art complex which spans the Leola Pike, Pennsylvania Route 23.

LLI is a lasting memorial to Earl Hess' outstanding achievements in the independent laboratory industry and a tribute to his rock-solid principles: good science, sound business practices, and commitment to a code of ethics. Earl also took exceptional care of his employees. During his long tenure at the helm of LLI, he prided himself on the fact that he never laid off one of his staff, even during business downturns or slack periods. And, on the LLI campus, he built three employee "benefits" that are unique in the independent laboratory world: a day-care center, an elder-care center and a physical fitness center.

Earl talked about his career and his values - and his early commitment to A2LA and the importance of laboratory accreditation - in an interview with A2LA News two years ago (July, 2000, issue). Here's some of what he had to say.

**On building a business.** "LLI was not an overnight success. I spent 10 years building its foundation, with little to show for it financially. But the lab developed a good reputation in the region. This provided the basis for our future growth. It's like putting up a large building - creating the foundation is a lengthy process, but if you don't do it well, the building won't stand. During those early years, many of my competitors seemed to be more successful, but most of them have disappeared from the market."

**Commitment to quality.** "I was committed from the earliest days to the highest level of scientific accuracy. There were times when I would leave the lab at the end of the workday not fully satisfied with the results of some of the day's tests. So I'd come back at night and redo the tests. Within the then-small staff, the realization grew that, if you're in any doubt, you'd better redo the test. When the company was small, staff caught on readily. The culture of Lancaster Laboratories was not created overnight. During the incubation period, we established the culture of commitment to integrity and commitment to quality."

**Early champion of accreditation.** "In the 1960's and early '70's, there was lots of price competition but there was no quality standard. I used to say that my neighbor with an eighth-grade education could start a lab and there'd be no way of distinguishing between it and LLI. Before our reputation was established, price ruled. There was clearly a need for a

third-party evaluation against a standard. I thought the labs ought to establish the standard and invite a third party in to accredit us to that standard. That would give clients a basis for selecting."

**Critical support for A2LA.** Given his conviction about the need for accreditation, it is no surprise that Earl was one of the first supporters of A2LA and one of the most generous contributors to A2LA during its critical, formative years. "In the early days of A2LA accreditation there was no immediate pay-off among clients; A2LA was not yet appreciated or known. But we believed in the concept and it was part of our long-term commitment to the principle of accreditation. In any case, the primary beneficiary of accreditation is the lab itself. It shows the lab where it stands, its weaknesses and strengths. Any impact on its sales to clients is secondary."

**So Earl contributed sorely needed money to the fledgling A2LA.** More importantly, he gave - and gave generously - time and talent. Earl and a couple of other key LLI staff members helped to develop A2LA's early criteria documents (no "25" or "17025" in those days). LLI's quality control manual (one of the first to be developed) became the model for A2LA and labs seeking A2LA accreditation.

**A fitting legacy.** Lancaster Laboratories became the first laboratory accredited by A2LA. LLI remains an A2LA-accredited lab, proudly carrying Accreditation Certificate "#1.01." Because of the lasting influence of Earl Hess, the lab will always be "first among equals."

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## Words of Thanks to A2LA

Periodically, an official of an assessed laboratory provides A2LA with feedback about the assessment experience. Recently, we were pleased to receive an especially complimentary letter from Bill Alexander, CEO of TIC-MS, Inc., located in St. Louis, MO. With Mr. Alexander's permission we are publishing salient excerpts from his letter.

We thank him for the kind words and we commend the two assessors who made this good impression. Here's a portion of the letter.

*On December 17th, 18th, 19th A2LA conducted an assessment of TIC-MS, Inc. for compliance with ISO/IEC 17025 and for technical competence.*

*TIC-MS, Inc. is one of the most audited independent labs in the country. Adding ISO/IEC 17025 to our ISO/IEC Guide 25, AS-9000, ISO 9002, AAR, 10 CFR, DOD/DSS Joint US Canadian Certificate Holder, ANSI Z-540 3rd party, and a wide variety of customer specific audits by Pharmaceuticals and Food packagers will make TIC-MS, Inc. one of the most widely accepted facilities in the country...*

*For the first time, TIC-MS, Inc. felt that the members of the assessment team were truly qualified to assess a calibration laboratory, not only for the quality program, but for the competency of the lab as well.*

*The two A2LA team members sent to TIC-MS, Inc. had a combined experience in actually managing calibration labs at the highest possible level of expertise of over 70 years. Imagine! The team was actually intimately familiar with every tiny aspect of managing and running a calibration laboratory.*

*This was the single most positive experience in our auditing experience, and as you know, we have had plenty of experience being audited. We give A2LA credit for their ability to field assessors of this caliber. If every certifying and accrediting body would field individuals with these kinds of credentials and practical experience, the "quality bar" would be raised to a new height, the playing field would be leveled for labs competing for recognition and international acceptance, and the customers of independent labs would finally get the consistent and competent service they deserve.*

*We were extremely pleased with the process and the positive outcome of the assessment and would like to formally thank A2LA and their excellent organization.*

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## Status of Transition to ISO/IEC 17025

On January 1st, A2LA began the final year of our transition to the new assessment standard, ISO/IEC 17025. This means that laboratories currently accredited to ISO/IEC Guide 25 must undergo an on-site assessment or gap analysis to ISO/IEC 17025 in 2002.

The [A2LA ISO/IEC 17025 Transition Plan](#) has been updated and can be accessed on the A2LA web site.

The updated plan's key change applies to laboratories undergoing ISO/IEC 17025 gap analysis; they will have only 30 days to respond to the gaps (areas of non-compliance with ISO/IEC 17025) identified during the analysis.

If your laboratory is currently accredited to ISO/IEC Guide 25 and you have questions about the transition plan, please call or e-mail your staff representative here at A2LA.

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### **Why does A2LA insist on Uncertainty Budgets?**

By Philip Stein

The Scope of Accreditation for every calibration laboratory accredited by A2LA is required to have and state a Best Measurement Capability, calculated according to the ISO Guide to the Expression of Uncertainty in Measurement (the GUM). In addition, there are many circumstances under which testing labs are required to calculate either full or partial uncertainty budgets. Why is this so?

ISO/IEC Guide 58, the international standard which governs A2LA's operations and that of many other laboratory accrediting bodies, requires in Clause 6.6.1.b (2) that, for calibrations, an accredited laboratory's documents shall permit identification of the type of measurement performed, the measurement range, and best measurement capability (BMC). Further, A2LA adheres to the definition of BMC found in EAL-R2, which states among other requirements that such calculations be performed according to the GUM.

Well, it would seem that combination of policies settles the question, but not really. A2LA could accept commonly accepted, reasonable values for the BMC of each parameter and the individual labs wouldn't necessarily have to address the difficult task of home growing their own values. In fact, the Measurement Advisory Committee is beginning to work to accomplish just that. But there's more.

A laboratory, especially an accredited calibration lab, has a special responsibility to its customers. Once accreditation has been granted, A2LA and its sister accreditation bodies are stating to the public that the accredited lab is capable of providing a step in the traceability chain.

Traceability requires an unbroken chain of measurements between the customer and the National Metrology Institute (NMI), and each link in that chain must contain a value and must also include either a GUM-conformant statement of uncertainty or a statement of conformance to an identified specification. In most cases, customers wanting traceability will require (or at least be happiest with) a GUM-type uncertainty statement. The customer then in turn incorporates the reported uncertainty into his or her own budget to pass on to the next level down in the pyramid. The bottom line is that in order to be a link in the chain, a laboratory must be able to correctly calculate uncertainty budgets.

By requiring demonstration of the calculation of BMCs, A2LA is assessing each lab's ability to understand its own measurement processes and provide good uncertainty statements to its customers. This is a necessary step before A2LA can grant accreditation because the A2LA logo on a certificate means that A2LA attests that the laboratory is competent and capable of being a part of a conformant traceability chain.

So next time you're sweating over an uncertainty budget, remember that you're doing your part to be a responsible member of the National Measurement System.

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### **2002 Board of Directors**

A2LA is pleased to present the members of the A2LA Board of Directors for 2002.

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*\* Newly elected Board members for the 2002 term*

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## Spring 2002 Training Course Schedule

### Title: ISO 17025 and Accreditation

- April 8-9, 2002 - San Francisco, CA
- June 3-4, 2002 - North Olmstead, OH

### Title: Introduction to Measurement Uncertainty

- April 10-11, 2002 - San Francisco, CA
- June 5-6, 2002 - North Olmstead, OH

### Title: Advanced Seminars in Measurement Uncertainty

#### A. Calibration Seminar

- April 15, 2002 - San Francisco, CA
- June 10, 2002 - North Olmstead, OH

#### B. Physical/Dimensional Seminar

- April 16, 2002 - San Francisco, CA
- June 11, 2002 - North Olmstead, OH

#### C. Measurement Uncertainty for Life Sciences Laboratories

- April 17-18, 2002 San Francisco, CA
- June 12-13, 2002 North Olmstead, OH

Descriptions of these courses and information on registration costs can be found in our "[Training Catalog](#)". You can also contact Ms. Julie Stevens, A2LA Training Coordinator, at (301) 644 3235 (e-mail: [jstevens@a2la.org](mailto:jstevens@a2la.org) ).

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## Changes...

After nearly nine years of service to A2LA, our colleague and good friend, Janneth I. Marcelo, resigned at the beginning of 2002 to accept a position at Georgetown University Law Center. At Georgetown she will serve as Manager of the Office of Admissions. She will be missed.

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## NACLA to sponsor first Accreditation Forum in the U.S.

The National Cooperation for Laboratory Accreditation (NACLA), a nonprofit corporation established to coordinate laboratory accreditation activities within the United States, is sponsoring the first-ever U.S. forum on laboratory accreditation. The forum, titled "World-Class Accreditation Today and Tomorrow",

will be held April 8-9, 2002, at the Hyatt Regency Crystal City in Arlington, Virginia. NACLA's Annual General Meeting will be held in the afternoon on April 9, 2002.

The following are some of the subjects that will be addressed in the course of the two days:

- Latest Developments in ILAC
- Implementation of ISO-IEC 17025
- ISO Guide 58/ISO-IEC 17011
- How Governments Are Relying on Accreditors
- Measurement Uncertainty
- An Update on NACLA
- The Impact of Dual Accreditation Systems: NACLA and NELAC
- Industry-Specific Accreditation Approaches.

More complete program information and meeting registration material can be found on the NACLA web site ([www.nacla.net](http://www.nacla.net)).

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