New Method for Providing Proof of Instrument Ownership & Calibration

By Matthew Sano
MAEBA Technical Committee Chairman

As qualified supervisors for certified firms are aware, we must keep all required instruments calibrated to NEBB standards. In recent years we have been made aware of various changes, the most important of which is the ability to use multi-purpose instruments to satisfy several categories.

The person responsible for each firm’s instruments must be sure of the range and resolution of each category and provide the required N.I.S.T. documentation.

The latest modification to our local procedure is to allow digital photographs. The digital photos need to be on a CD, along with a paper copy of the same photos and printed instrument calibration sheets for each instrument. The entire package needs to be sent to the MAEBA offices for review and acceptance before forwarding the proper documentation to NEBB National. All NEBB firms must have their instruments checked every two years during their recertification.

2007 MAEBA Recertification and Educational Seminar

The Mid-Atlantic Environmental Balancing Association (MAEBA) will be conducting its annual Recertification and Education Seminar on September 23-24, 2007.

This year’s seminar will be held at the ACE Conference Center. The ACE Center is located in Lafayette Hill, PA within easy driving distance from Center City Philadelphia.

On Sunday night, a cocktail reception will be held at the Green Valley Country Club, also in Lafayette Hill, PA. The reception will run from 6 pm-8 pm. On Monday, September 24th, breakfast will be available from 7-8 am. At 8 am, Safety Professional, John Connolly, will give a presentation on “Electrical Hazards Facing Balancers.” The presentation will inform balancers about precautions they can take to protect themselves and their crews in the workplace.

Terry Smith, with Universal Motors in Philadelphia, will then be giving a presentation on variable frequency drives.

Don Pittser, from Jedi Balancing in Colorado, and Andy Stadheim, P.E., from AiRNAB Air Balancing Software Systems, will present “Technology and Balancing.” The presentation will deal with the fact that TAB firms are expected to perform more testing in less time. Often times, the Building Certificate of Occupancy hangs in the balance awaiting the final TAB report. Some technologies available to help manage, collect and more quickly deliver a final balancing report will be demonstrated, including wireless polling of flow hood readings. All of the technology is summarized by an owner of a TAB company who shares his firsthand experience of the benefits of moving to a fully digital paperless system.

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Improving the Quality of your TAB Report

By Brian F. Matyola

Like most things these days, procurement of testing, adjusting and balancing (TAB) services can often come down to reputation and pricing. Assuming that each of us understands the market value of each project and gets close on pricing, the next step is reputation - built on quality and standing apart from your competition. For a quality-driven TAB firm, it is hard to set yourself apart in a world where your client (construction managers, contractors, etc.) only occasionally reviews your data for compliance to design values. As such, the only way to stand out is a professional looking end product. A well-prepared TAB report will keep that customer coming back. Do not give that customer a reason to shop around.

What is a quality, professional looking (TAB) report? Working for a design/builder with an internal engineering and commissioning department, I see it from the other perspective. You can always look in the NEBB procedural guide, but here are the most important items:

- A clear organized table of contents provides a guide to your report.
- Keep the pages numbered sequentially. This allows for easy identification of forms.
- Dates when the data was collected.
- A narrative summary of system conditions and “noteworthy” deficiencies. As well as what changes have been made to the system. For example, if sheaves were changed, pump impellers changed, etc.
- Do not leave blanks - this would appear that one forgot to input the available data, when what was probably meant was that it was not available or applicable.
- Utilize the remarks section on the forms; record any “pertinent information”.
- Above all, your data needs to be accurate, make sure the “shall have” information is all there.

If you are not recording field data on a laptop or a hand held device, you should be. Software developed for balancing, or the use of MS Excel, allows quick modifications to customize your forms to meet your specific task. PDAs with TAB documentation on them are available. I am told of TAB firms that operate totally paperless. There is no reason for a report to take several days to be finalized once the fieldwork is complete. The field technician can send the report electronically to his office for review and formalization, and it can, if needed, be delivered the same day.

Take out an old report from a year or two ago; are you able to understand everything on that report? Is it well explained? You should be able to pick up that report and not have to guess about anything on that report. The quality of your report and how its data is interpreted will be what leaves an impression. Good or bad. Remember, your name goes on that report, and after all, how many trades let you sign your work?

2007 NEBB Annual Meeting and Educational Conference

The 2007 NEBB Annual Meeting and Educational Conference will be held at Disney’s Grand Floridian Resort & Spa at Walt Disney World® Resort, Florida on November 8 - 10, 2007. Technical sessions will feature presentations by industry experts on topics related to NEBB disciplines: TAB, Sound and Vibration, Cleanroom Performance Testing, Building Systems Commissioning, Retro-Commissioning and Fumehood Performance Testing.

NEBB will host its 10th Annual Golf Outing at the PGA-rated, Disney’s Magnolia Golf Course. This year’s “Get-Acquainted” Party and Spouse/Guest Breakfast will be child friendly. During the “Get-Acquainted” Party at Epcot®, children 5-12 will have their own supervised party at the American Adventure Parlor, complete with food and child-centered activities. For additional information regarding the NEBB Annual Meeting, contact Sheila Simms at 301-977-3698 or sheila@nebb.org.
Presidents Column

Traditionally, when discussing system performance, success is based on achieving the right “numbers”. In the context of testing, adjusting and balancing, NEBB and MAEBA define success as the satisfaction of adjusted values that are within +/-10% of the design values. In commissioning, depending on the project, the equipment, etc., it could be that a system is successful if the space temperature is within 5% of the design criteria for 24 hours consecutively, or a variety of other numerical criteria. While the aforementioned examples describe systems that may meet the numerical requirements, they do not necessarily represent success.

Fortunately, the paradigm is changing. Mechanical systems will be considered successful when they achieve the numbers, but do so in a way that minimizes energy consumption, and subsequently, their “carbon footprint”. We can already see NEBB responding to these forces by promoting our abilities to assist in the “greening” of buildings. Their new brochure “Green Buildings,” which is available to certified firms, highlights the point. While I expect training classes and potential certifications to follow, my belief is that nothing will replace the importance of the fundamentals.

For that reason, Fundamentals will be my focus of leadership over my remaining term as President of MAEBA. For premier firms, those with NEBB certification, a return to “fundamentals” will include training on the energy and environmental impact of seemingly minor decisions made in the field. It will also develop and encourage the invaluable, but lesser-known skills of the NEBB-firm, such as the identification of deficiencies, and the recommendation of improvements.

I am looking forward to the opportunity to lead this organization, and to continue our leadership in the industry and within NEBB.

Lockout for Safety

Balancing and commissioning jobs bring you into close contact with many safety hazards. These include machinery, fans, electrical equipment, and confined/limited spaces. In order to protect yourself, do you have lockout/ tagout procedures in place? The steps are simple: shut off power; tag and/or lock; test; release or block stored energy; perform work. There is one more step, possibly the most important: COMMUNICATE.

Let others know you are working on the equipment/ system and when it is locked and when you un-lock.

These procedures will protect you from the inadvertent application of power or start up of equipment while you are working. They can save you from serious injury or death.
A look back at the 2006 MAEBA Recertification and Educational Seminar

MAEBA would like to express our thanks to the PROAC Corporation, National Energy Control Corp. and Shortridge Instruments, Inc. for Co-Sponsoring the MAEBA Cocktail Reception during the 2006 MAEBA Annual Recertification and Educational Seminar.

Let’s not forget “Bat Boy”. MAEBA’s dedicated member, Joe DiAugustine of Valley Testing & Balancing, came to the rescue at the Hershey Lodge when a bat found its way into the conference hallway and decided to fly around for awhile. The management at Hershey presented Joe with a 5 lb. Hershey’s chocolate bar as thanks for catching and freeing the bat (unharmed).

Ann Eads, widow of Bill Eads, presenting the 2006 William G. Eads, P.E. Award to Bobby Roaten.

Thank you to all of our 2006 Vendor Displays.

PROAC Corporation          Shortridge Instruments, Inc.          National Energy Control Corp.
Alnor/TSI                   Technology Management Group          Sikora Data Technology
National Association of Power Engineers Brown Transmission & Bearing
Duct Leakage Testing and the NEBB Certified Firm

By Thomas DeMusis

In their Seventh Edition, NEBB states that “Duct leakage testing is outside the scope of the NEBB Procedural Standards”. While the demand for leak testing of installed duct systems may have diminished somewhat with the implementation of four bolt gasketed connections and the development of improved sealants, we still routinely see specifications requiring testing. The balancing contractor’s participation in the testing may vary, but the key factors in successfully bidding and executing this type of work haven’t changed.

Understand your Scope of Work

Is your scope clearly defined? Does the project specification contradict the project scope documents? Have you reviewed all pertinent spec sections, such as the general requirements, ductwork specs and the TAB specification? Will you be witnessing the test or performing the entire procedure? Who will provide the test blanks? Who provides the test equipment? Many times these issues are not clearly outlined in your bid packages, so be sure to ask the right questions.

Anticipate the Jobsite Conditions

Find out as much as you can about the project to determine the layout of the project and how it will affect your access for test equipment and connections. Know the contractors involved and their track record for housekeeping, scheduling and congestion on the floors. These issues can dramatically affect your productivity. Be aware of seasonal considerations, your upcoming workload and the quality of the installing contractor. Be sure adequate power is available for your test equipment.

Get Involved Early in the Project

A little time spent up front can save hours of frustration and lost time later. Agree on report formatting early on. Stay in touch with your clients and the progress of the project. Don’t miss opportunities to group tests for efficient performance and hold all involved accountable for maintaining the agreed to schedules. Your time is your most precious asset – don’t let others waste it.

Perform like a Professional

You will be judged by your onsite performance and efficiency, so professional behavior is a must. Your appearance, and that of your equipment, is an important factor in your client’s perception of your firm. Documentation must be concise and complete, and delivered in the agreed to time frame. Your demeanor could be the difference between passing and failing when results are marginal and can go a long way towards earning you the benefit of the doubt in close situations. Above all, maintain your professional integrity. No shortcut is worth compromising the reputation of your firm, or that of our certifications.

2007 MAEBA Recertification Seminar

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Brian Sikora, of Sikora Data Technology, will give a presentation on “Automated Reporting.” The ever-increasing availability of wireless communication and internet access allows balancing firms to boost their efficiency and improve the way that they interact with their clients. Inexpensive handheld devices not only speed the collection of test and balance results, but also allow balancing firms to create a mobile workforce. Improved internet technology allows the balancing results to be immediately shared with the relevant parties in both a secure and interactive manner.

There will also be a vendor display during the lunch break at which time participating vendors will be given a chance to show off their latest products at display tables. For more information on vendor displays, contact the MAEBA office.
Calendar of Events

August 17-19, 2007
NEBB TAB Supervisor Review Seminar
NEBB TEC - Tempe, AZ

September 15, 2007
NEBB National Written Exam
NEBB MAEBA Practical Exam

September 23 - 24, 2007
MAEBA Recertification and Educational Seminar
ACE Conference Center, Lafayette Hill, PA 19444

September 26-29, 2007
NEBB Retro-Commissioning Seminar and Exam
NEBB TEC - Tempe, AZ

October 3-6, 2007
NEBB Sound & Vibration Seminar and Exam
NEBB TEC - Tempe, AZ

November 8 - 10, 2007
2007 NEBB Annual Meeting and Educational Conference will be held at the Grand Floridian Resort & Spa in Orlando, FL.