

ESD PROGRAM DEVELOPMENT & ASSESSMENT (ANSI/ESD S20.20 SEMINAR)

AUDITING MEASUREMENTS, STRATEGIES, AND PITFALLS

Dates: May 4-6, 2010, Teradyne Conference Center
600 Riverpark Drive • North Reading, MA • Lunch and refreshments provided

May 4-5, 2010 • 8:00 AM - 5:00 PM

ESD PROGRAM DEVELOPMENT & ASSESSMENT (ANSI/ESD S20.20 SEMINAR)

Developing a program based on ANSI/ESD S20.20

Instructors: David E. Swenson, Affinity Static Control Consulting, L.L.C.

Carl Newberg, MicroStat Laboratories & Dangelmayer Associates, L.L.C.

The seminar provides instruction on designing and implementing an ESD control program based on ANSI/ESD S20.20. The course provides participants with the tools and techniques to prepare for an ESD facility audit. This two-day course is an ESDA certification requirement for in-plant auditors and program managers who are working toward professional ESD certification.

The following topics are covered in this course:

- ▲ Overview of ANSI/ESD S20.20
- ▲ Administrative elements
- ▲ Technical elements
- ▲ ESD program techniques for different applications
- ▲ ESD program assessment
- ▲ Overview of the assessment process
- ▲ How to approach an assessment
- ▲ The audit checklist and follow-up questions

Please note: This course is limited to a maximum of 30 attendees, on a first-come, first-served basis.

NOTE

This class is part of the ESDA Program Manager Certification curriculum. More details on the Professional Certification Programs offered by ESDA are on our website at www.esda.org/certification.html

An ESDA Tutorial, Co-sponsored by the Northeast Chapter ESD Association

ESDA Association • 7900 Turin Rd Bld 3 • Rome NY 13440
Phone 315-339-6937 • Fax 315-339-6793
info@esda.org • www.esda.org



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May 6, 2010 • 8:00 AM - 5:00 PM

AUDITING MEASUREMENTS, STRATEGIES, AND PITFALLS

Instructors: Ted Dangelmayer, Dangelmayer Associates, L.L.C.

Carl Newberg, MicroStat Laboratories & Dangelmayer Associates, L.L.C.

Compliance verification is one of the most important elements of ESD program management and there are many technical and administrative pitfalls that can be avoided. The attendee will learn not only how to make valid auditing measurements in accordance with ESD TR53 – **Compliance Verification of ESD Protective Equipment and Materials**, but also how to recognize and avoid common pitfalls. Common instruments will be explained as well as the invalid test results that can result when they are used incorrectly. Advanced auditing techniques will also be covered that enable Class 0 devices to be handled successfully.

There are many ways to administer effective Compliance Verification programs. Two successful examples will be presented that were developed independently by different companies. Hidden administrative pitfalls that often result in poor compliance will also be discussed.

This tutorial will be highly interactive with live demonstrations, in-plant photographs, and compelling video clips. Students will be encouraged to ask questions and to participate in the discussions.

Sample topics in this tutorial:

1. Common Auditing Measurement Pitfalls
 - a. Field Meters
 - b. Ionizers
 - c. Resistance Meters
2. ESDA TR53 Compliance Verification Measurements e.g.
 - a. Grounding / Bonding Systems
 - b. Worksurfaces
 - c. Wrist Straps
 - d. Constant Monitors
 - e. Footwear
 - f. Flooring
3. Common CDM Compliance Problems
 - a. Personnel Compliance
 - b. Visual Verification
4. Auditing Administration Strategies - Examples & Pitfalls
5. Advanced Auditing Techniques
 - a. ESD Event Detection Principles
 - b. Process Analysis Strategy
 - c. Advanced Measurement Techniques
 - d. Advanced Auditing Case Study

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ABOUT THE INSTRUCTORS

David E. Swenson retired from 3M Company in 2003 after 35 years of service. Most of his career was involved with investigation and resolution of static electricity problems, development of new static control products and training of 3M and customer personnel globally. After retirement, David and his wife Geri established Affinity Static Control Consulting, LLC, to offer electrostatic solutions to industry. He has been a member of the ESD Association since 1984 and has served in many capacities including Sr. VP and president for a total of 4 years each. He is a four term elected member of the Board of Directors and currently serves as President Emeritus of the Board of Directors. He has served as Symposium General Chair, long term Standards Committee member and Working Group Chair of several committees and is the current chair of the Grounding WG. In addition, Dave was the ESD Association Technical Advisor and Chief Delegate of the US National Committee to IEC TC101 for 8 years and is currently a US Technical Expert. He was awarded the ESD Association Outstanding Contributions Award in 2002 and the Joel P. Weidendorf Memorial Award for service to Standards in 2004. A life member of the ESD Association, Dave has authored numerous technical papers covering ionization, grounding, packaging, triboelectrification, test methods for ESD materials and ESD control program implementation, presented around the world. He is Treasurer of the Texas Chapter of the ESD Association and a long term member of The Electrostatic Society of America. Dave is an ESD Certified Professional Program Manager/Instructor and an original iNARTE Certified ESD Engineer.

Carl Newberg is the President of MicroStat Laboratories and is a Director of S20.20 Manufacturing Programs for Dangelmayer Associates, L.L.C. He has a B.S. degree in Metallurgical Engineering, a M.S. Degree in Materials Science, and a professional engineer's license (Met. Eng.). He is also an iNARTE Certified ESD Engineer, and is one of the first to test and receive certification from the ESDA as a Certified ESD Program Manager. He is pursuing ISO 9000 Lead Registrar certification from RABQSA. He has held positions as the ESD Program Manager for Western Digital Corporation, and has been actively involved in the corporate ESD program at Seagate Technology and IBM Corporation. Currently he works for Magnecomp Precision Technology as a Senior Scientist – Contamination Control. Carl has been a member of the ESD Association since 1995. He has been a Board member since January, 2005, and was the Technical Program Committee Chairman for the 2004 EOS/ESD Symposium, Vice Chairman for the 2005 Symposium, and General Chairman for the 2006 Symposium. Currently, Carl is the Standards Business Unit Manager, overseeing standards development for the ESD Association. Carl was the 2009 recipient of the David F. Barber Sr. Memorial award from the ESD Association.

Ted Dangelmayer is the president of Dangelmayer Associates, L.L.C. and has assembled an ESD consulting team consisting of the foremost authorities in every aspect of ESD product design and manufacturing. He received the ESD Association's most prestigious award - "Outstanding Contributor", was President of the ESD Association, Chairman of the ESDA Standards Committee, and General Chairman of the EOS/ESD Symposium. He has published two editions of his book, ESD PROGRAM MANAGEMENT numerous magazine articles, and technical papers. Ted holds a BSEE degree, three patents, is NARTE Certified, and has successfully completed the ESD Association ANSI/ESDA S20.20 Course for Program Managers and Consultants. He is currently President of the Northeast Chapter of the ESD Association and a member of the national ESD Association's Standards Committee, Education Committee.

Ted co-chaired the Lucent Global ESD Leadership Team where he developed the most cost effective program in the industry. Under Ted's leadership, Lucent Technologies – North Andover, MA was the first site in the USA to become S20.20 certified. At the time, the Lucent site had 2,000,000 square feet of floor space and 12,000 employees. The lead DNV S20.20 auditor was quoted as saying "I've audited literally hundreds of ESD programs and, without a doubt; the Lucent program is the best I have ever seen. It's a world class benchmark, and you can quote me on that!" Upon retirement from Lucent in 2001, he became Director of Technology and Program Design for the Professional Services Division of Ion Systems in Berkeley, California and created Dangelmayer Associates in 2003.

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Lunch and refreshments provided

Registration Form

First Name: _____ Last Name: _____

Company Name: _____

Street: _____ City: _____

State/Province: _____ Country _____ Zip/Postal Code: _____

Address is (please circle the one that applies) Home or Company

Phone: _____ Fax: _____ Email: _____

Course Selection

May 4-5, 2010

ESD Program Development & Assessment (ANSI/ESD S20.20 Seminar)

May 6, 2010

Auditing Measurements, Strategies, and Pitfalls

	Cost on or before 4/7/2010		Cost after 4/7/2010	
	Members	Non-Members	Members	Non-Members
ESD Program Development & Assessment (ANSI/ESD S20.20 Seminar)	\$1,495	\$1,595	\$1,695	\$1,695
Auditing Measurements, Strategies, and Pitfalls	\$495	\$595	\$695	\$695

Payment Information

Payment is required at time of registration. Only checks drawn in U.S. currency on a U.S. bank that is a member of the Federal Reserve will be accepted; make checks payable to ESD Association. Visa®, Mastercard®, American Express® and Discover® are accepted.

Amount enclosed \$ _____ Check Credit Card

Credit card type: Visa® Mastercard® American Express® Discover®

Credit card number: _____ Expiration date: _____

Name on card: _____ Security code: _____

Cardholder's signature: _____

Accommodations

Residence Inn by Marriott Woburn
300 Presidential Way, Woburn, MA 01801
(781) 376-4000

Courtyard Boston Woburn
240 Mishawum Road, Woburn, MA 01801
(781) 932-3200

Mail, or fax this form with payment to:

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