

Workshop on High Power Electromagnetic (HPEM) Threats – High Altitude Electromagnetic Pulse (HEMP) and Intentional Electromagnetic Interference (IEMI)

25-26 March 2010
Underwriters Laboratories, CCS
Fremont, CA (Silicon Valley)
(Visit www.narte.org for more information)

This is the second workshop covering new developments in two important high power electromagnetic (HPEM) threats – High-altitude electromagnetic pulse (HEMP) and Intentional Electromagnetic Interference (IEMI). In 1989 the International Electrotechnical Commission (IEC), in particular its technical committee 77 and its subcommittee SC77C headquartered in Geneva, began to develop HEMP standards, and as of August 2009, twenty publications covering the threats of HEMP and IEMI, their impacts on commercial electronic equipment and systems, and protective methods have been published. In 2004 and 2008

In the HPEM Threats workshop, you will learn:

- Overview of the IEC HEMP Publications
 - The effects caused by HEMP
 - The radiated and conducted HEMP environment
 - The classification of the HEMP environments
 - HEMP test approaches
 - HEMP test facilities worldwide
 - HEMP protection approaches
 - HEMP immunity test standard
 - HEMP generic standard
- Overview of the IEC IEMI Publications
 - The effects caused by IEMI
 - The radiated IEMI environment
 - The conducted IEMI environment
 - Measurement methods for IEMI

- HPEM/IEMI test facilities worldwide
 - Review EMP Commission Reports
- Review of HEMP and IEMI standardization work in other organizations

Who Should Attend

Those responsible for protecting systems from HPEM:

- Product Managers and Developers
- Critical Facility Developers
- EMC Engineers and test technicians
- Test Instrumentation Developers
- Test instrumentation and chamber manufacturers

Hotel

Arrangements are responsibility of attendee. UL CCS recommends the Hyatt Place Fremont/Silicon Valley, 3101 West Warren Avenue, Fremont, CA 94538.

the US Congressional EMP Commission published two important documents dealing with the threat of HEMP on the United States with emphasis on the critical infrastructures. These two publications have clearly indicated the level of threat of such high power electromagnetic fields to society in general and to specific infrastructures such as power and communications.

In addition to the work performed by the IEC and the EMP Commission, three other organizations have become active in writing standards to protect equipment and systems against these threats. First the IEEE EMC Society is working on a recommended practice for protecting public accessible computers from IEMI. The ITU-T has recently completed work on two recommendations to protect telecommunications centers from HEMP and IEMI. Finally Cigré (International Council on Large Electric Systems) has recently begun work to write a report on how to protect high-voltage substation electronics from the threat of IEMI.

This workshop will review the standardization work of the IEC, the IEEE, the ITU-T and Cigré. In addition, the major features and conclusions of the EMP Commission will be reviewed.

Tel: 510-623-6000
(www.hyattplacefremont.com).

Expert Instructor

Workshop features as lead instructor, Dr. William Radasky, IEEE Fellow, EMP Fellow, Chairman of IEC SC 77C, and President of Metatech Corporation.

Workshop location

UL CCS Headquarters USA
47173 Benicia Street
Fremont, CA 94538
510-771-1000

Fee Includes:

Lecture notebook, lunch, breaks, and completion certificate.

Agenda

March 25: Registration: 8:30 am
Class: 9:00 am to 5:00 pm
March 26: Class: 9:00 am to 5:00 pm

Registration Form **Contact: iNARTE**
Telephone: 1-800-89-NARTE **lawrence@inarte.us**

Ms./Mr. _____
Company _____
Address _____
City _____ State _____ Zip _____
Daytime Phone _____ Fax _____
Email _____
Credit Card (check one): MC _____ Visa _____ Amex _____
Credit Card No: _____
Expiration Date: _____
Signature: _____

Check or Credit Card Number must accompany registration.

Alternatively, secure registration can be made on
<http://www.narte.org/h/HPEM.asp>

HPEM/HEMP/IEMI workshop

By March 5, 2010*:	\$ 900 USD _____
Add \$200 after March 5 or at the door	\$ 200 USD _____
Add 1 copy of workshop notebook**	\$ 100 USD each _____
	Total USD \$ _____

If a check is used for payment, make it payable to iNARTE in US dollars (drawn on a US bank) and mailed to the address on the iNARTE web site.

* Please do not mail after March 5, 2010.

** Order by March 1, 2010 for pickup at the workshop.

NOTE: You are not registered until you receive confirmation

The organizing committee reserves the right to substitute speakers, modify the program (or lecture notes), restrict attendance or to cancel the workshop. In the event the workshop is canceled, registration fees will be refunded (credit cards are only processed if workshop is held). No refunds will be made to individuals who cancel after March 5, 2010. Substitutions are allowed. ***Without a minimum of 15 attendees signed up by 15 March 2010 the workshop will be cancelled and registration fees returned or not processed. It is suggested that you book refundable travel arrangements as appropriate if workshop is cancelled.***