

**SEPTEMBER 2006 ISSUE**

**IN THIS ISSUE**

*Pace Activities Report*.....Page 4  
*Calendar*.....Page 8  
*History Corner* .....Page 10

**Chairperson's Message** *By David Wolff*



**W**elcome back from the summer break. I hope that everyone was able to avail themselves of some extra time off. For me it was an exciting time as my wife and I saw our first child Laura graduate high school and go off to college. We experienced the mixture of emotions that comes with the shared excitement of her future and the inevitable separation that marks her transition into adulthood. To celebrate the occasion we were fortunate to spend two weeks traveling Europe. During this time I was able to reflect on the world

that Laura was graduating into as compared to the one that my wife and I experienced some 30 years ago. In many ways it is a very similar place. The cold war has been replaced with the global war on terrorism but Laura's value systems and cultural norms are fundamentally unchanged from ours. In fact I find that the generational gap between my children and me is much smaller than the one that I experienced with my parents. From a technological perspective however, the world, as I had expected it would be 30 years ago, is quite a different place. As a teenager I would often wonder and anxiously anticipate what technology would bring in my lifetime. During our recent trip I realized I was living that wonderment. My

handheld communicator allowed me continual wireless connectivity via electronic mail and voice as well as access to something called the World Wide Web providing a ubiquity of information unthinkable 30 years ago. My portable GPS satellite navigator took us flawlessly from place-to-place, country-to-country, without missing a beat, affording me the luxury of never being lost. My ATM and credit cards allowed me seamless access to funds no matter where I was. My palm size video and still cameras, both digital with gigabyte memories, provided me with more photographic capability than I would ever need, including real-time viewing and editing\*. We also had the benefit of unlimited  
*(Continued on page 3)*

**IEEE AWARDS** *Long Island Section*

One of the most important activities of a professional organization is to recognize and honor members who have made meaningful technical, management or professional contributions. Our Section has an active Awards Committee that screens and nominates worthy candidates for a wide variety of Section, Region and National Awards. The successful nominees are given their awards at our annual Awards Banquet. All of our Section's members are welcome to submit nominations to our committee for any of these awards.

We normally give five Section Awards annually in the following categories:

- Outstanding Young Engineer
- Technical Accomplishment
- Contributions to our Profession
- Education
- Outstanding Technical Management

Further details on these awards can be found on our Section's website [www.IEEE.LI](http://www.IEEE.LI). Click on the Awards link.

Our Section is part of IEEE Region 1. Region 1 also gives Awards for a variety of technical, management and professional contributions. Many of our Section's members have received Region 1 Awards. Further details can be found on the [www.IEEE.LI](http://www.IEEE.LI)

website. Click on Awards and then click on Region 1.

The IEEE USA and IEEE headquarters give national and international awards. Our Committee is mostly concerned with nominating candidates to be IEEE Fellows. The grade of Fellow is given annually to a maximum of 0.1% of IEEE members. It is awarded to engineers who have made distinguished contributions, usually of a technical or management nature. There are currently about 75 Fellows in our Section. There is much work involved in sponsoring a Fellow candidate. The Fellow website describes the procedure in detail. It can be accessed by going to [iee.org](http://iee.org) and then search for Fellow Awards.

All of our Fellows owe a debt to the person who sponsored him or her. While we encourage any of our members to sponsor a candidate, I particularly wish to appeal to our current Fellow members. Fellows should be in a good position to judge if the work of a colleague qualifies. Fellows should want to help someone in the same way that their sponsor helped them.

If you have any question or know of candidates for any of these awards, please let me know. I will make certain that any candidate gets carefully considered by our Awards Committee.

Jesse Taub  
 IEEE Long Island Section  
 Awards Chairman  
[jjtaub@aol.com](mailto:jjtaub@aol.com)



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To get the on-line PULSE and get up-to-date information about the Section, visit our web site at: [www.IEEE.LI](http://www.IEEE.LI)

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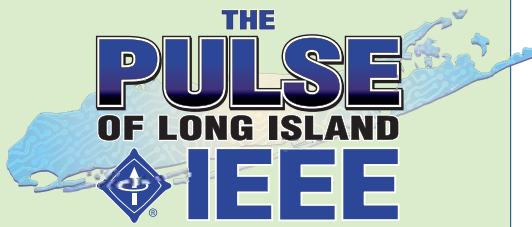
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*(Continued from page 1)*

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David L. Wolff

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For information on membership in the Long Island Section of IEEE contact Ted Pappas  
tpappas@keyspanenergy.com

entertainment using hand-held video and music playing devices. These are just a few of the most obvious ones. I am sure there are many others so inculcated in our lives that we fail to realize or appreciate their impact.

Yet with all these wonderful innovations I live with a nagging concern borne from the fact that the pace of technological advancement is increasing at an exponential rate. It would appear we are caught in an unstable loop that has no apparent equilibrium point and the ability of our social institutions to adapt – as they are constrained by our biology - will increasingly lag behind our ability to reinvest innovation for even more innovation.

A back of the envelope tour of developments on earth (from an electronics perspective) shows that it took some 3 billion years of life before a form capable of non-biological innovation evolved. It took another 150,000 years or so to reach the Neolithic period when civilization first began to emerge. From the Neolithic period it took roughly 10,000 years to discover electricity followed by only 200 years before the invention of the transistor. We now have palm size computers and the internet only 60 years later. The trend is clear and unmistakable. The question is whether this trend will continue for the betterment of human kind or whether we will eventually reach a point that forces equilibrium. I suppose only time will tell.

A sobering article entitled "Life After Earth: Imagining Survival Beyond This Terra Firma" ran in the August 1 edition of the New York Times science section. It spoke about a group advocating a dooms-

day base on the moon in which our biological and cultural artifacts would be stored to ensure the future survival of human kind. It's like archiving all your computer data in an offsite location.

Meanwhile, returning to more mundane matters, as you read this article Laura will be experiencing her first days of college and I hope she is adapting well. I am proud she is among the 30% of woman pursuing a field in Science and Technology and I am thankful for the modern technology that tempers my separation anxiety by providing numerous means of communication with her at any given time. As I did 30 years ago, I am now wondering and anxiously anticipating what technology will bring in the next 30 years; hoping that I will still be around to witness it and holding a glimmer of hope that advances in medical technology might even see me through another 30 years after that. I remain cautiously optimistic about our future but that nagging concern will not go away. All in all we are lucky to live in a very exciting time!

I hope you approve of our new Pulse layout. As I communicated to you over the summer, our agreement with Mainly Marketing provides a much needed facelift to the publication as well as being financially advantageous to the section. Once again I urge you to encourage advertising in the newsletter and to support our advertisers.

**David Wolff**  
dwolff@ieee.org

*\* By the way, I found that the film camera is virtually extinct as I did not see a single one in all of my travels.*

### The PULSE of Long Island

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## U.S. IT Infrastructure Not Adequately Prepared for Cyber Attacks, Says IEEE-USA

Pace Chairman

By: Irwin Weitman, P.E.

### NEWS from IEEE-USA

1828 L Street, N.W., Suite 1202, Washington, D.C. 20036-5104

WASHINGTON (14 July 2006) -- Because our nation's information technology infrastructure is highly vulnerable to hackers, terrorists, organized crime syndicates and natural disasters, increased funding for cyber security research and development is needed, according to a recent position adopted by IEEE-USA.

"Because of society's complete reliance on information technology and cyber networks, all the critical infrastructures and networks are interdependent and interconnected," IEEE-USA stated. "A cyber attack on one sector's infrastructure may have devastating consequences to another sector. U.S. infrastructure is not adequately prepared to defend against such risks."

Nearly every aspect of life in the United States is tied to computers. Air traffic control systems, power grids, financial systems, public health records and military and intelligence cyber networks, among others, all depend on computer networks. According to IEEE-USA, core Internet protocols such as Internet routing, e-mail and end-user authentication are at risk of cyber attack.

To help mitigate the risk of attack,

IEEE-USA recommends that Congress and the executive branch work with private industry to:

- Authorize and appropriate increased and stable funding for cybersecurity research
- Encourage and support cyber security technology transfer programs
- Facilitate commercialization
- Facilitate development & implementation of cyber security standards
- Support cyber security education programs

"Not only has the government traditionally played an important role in financing such efforts, but IEEE-USA strongly believes that, without the government driving a long-term cyber security vision, industry will most likely continue to make only incremental advances and improvements based on short-term, market-driven and adverse risk factors."

The position is accessible at [www.ieeeusa.org/policy/positions/cybersecurity.asp](http://www.ieeeusa.org/policy/positions/cybersecurity.asp).

## IMPORTANT LEGISLATION FOR THE US ENGINEER Your Support is Needed

Congress will be voting on a bill called The American Competitiveness Initiative sometime between Sept 5th and Oct 10th. This bill will drastically increase the amount the Federal government spends each year on basic research, \$10 billion in 2007 alone. It will also increase spending on education and students at all levels. This bill represents a huge investment in our high-tech economy and our high-tech workforce, and has enormous potential to help our profession, but it is at risk as other groups push their preferred spending programs in front of it. Legislators need to hear that their voters support this program and understand its

importance to their local communities.

The best tool that we have to attract legislators' attention is the voices of our members. Letters, e-mails, and phone calls to the legislators who represent Long Island from a relatively few voters could have an enormous impact whether or not this bill gets passed.

With a few mouse clicks you can easily send your Congressman an e-mail in support of this bill. Use your IEEE Web Account to access the IEEE-USA's Legislative Action Center (LAC) at [www.capitolconnect.com/ieee](http://www.capitolconnect.com/ieee). If you have any questions contact Russ Harrison at [r.t.harrison@ieee.org](mailto:r.t.harrison@ieee.org) or (202) 530-8326.



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## LECTURE

The Long Island Chapter of IEEE Electromagnetic Compatibility Society is presenting a lecture titled

# Overcurrent Protection Design

**Speaker: Mr. Carl Lindquist, VP New Product Development, San-O Industrial Corporation**

**Tuesday, October 10, 2006, 6:00PM**

### Who should attend?

People interested in learning about overcurrent protector selection and alternate sourcing selection.

### Abstract:

Those responsible for designing circuits using overcurrent protectors, as well as those purchasing such protectors, often misinterpret specified parameters and "equivalent" devices when seeking primary and secondary sources. A presentation will provide a brief overview of various types of overcurrent protectors, including fuses, PTC's, circuit breakers, etc. The discussion will concentrate on fuse design, the relative strengths and weaknesses of different types of fuse designs, important protector param-

eters and documentation recommendations.

### Seminar Coordinators:

Mr. David Sterner, Mr. Sandy Mazzola

### Speaker Biography:

Carl has worked in the circuit protection field for nearly 40 years, starting as a Development Engineer at Western Electric Headquarters Staff Purchasing in New York City. He joined San-O Industrial in 1980. Carl has been a member of the IEEE- Surge Protective Devices Committee (SPDC) for over 15 years, chairs a subcommittee at the Electronic Component Assemblies & Materials Association (EIA/ECA Passive Components Committee) and chairs a working group established to generate a new safety

standard for telecommunications overcurrent lightning surge withstand protectors at the Telecommunications Industries Association (TIA TR41).

### Location, Time, and Registration:

This lecture will be held at BAE Systems located at 450 Pulaski Road, Greenlawn, NY. The facility is located just east of Park Ave (Suffolk County Rte 35) on Pulaski Road. The presentation will begin at 6:30 PM. Appetizers, snacks & beverages will be served starting at 6:00 PM. Seating is limited. If you wish to attend, an RSVP is required prior to the meeting. To register please visit the calendar page of the IEEE Long Island Website, [www.IEEE.LI](http://www.IEEE.LI), click on the registration link, and fill out the form.

## LECTURE

The local entities of the ASME, AIAA, ISA, IEEE, and SWE are proud to present an evening lecture on

# THE HISTORY OF AVIATION ON LONG ISLAND

**September 20, 2006, SUNY Farmingdale, Lupton Hall Room T101**

*Pizza served at 6 PM: Lecture at 6:30PM*

A Lecture by Robert W. Klein



Long Island is known as the Cradle of Aviation. This is the confluence of aerospace, mechanical and electrical technologies, and is appropriate for this joint meeting at which Northrop Grumman Vice President of Engineering, Logistics and Technology, Robert W. Klein, will present the history of aviation on Long Island and provide some little known local facts about the development of aviation and Long Island's role in it.

Bob is responsible for over 2000 engineers located in New York, Maryland, Florida and California supporting

airborne early warning, electronic warfare, aircraft product support and services, decision support and targeting, maritime systems integration, homeland security and advanced capabilities development integrated product teams. He serves on a number of professional organizations including Chairman of the Technical Operations Council of the Aerospace Industries Association, Vice Chairman of LIFT, Executive VP of LIMSAT, Long Island Technology Hall of Fame Committee; and Advisory Committees for Polytechnic University, SUNY Stony Brook, Stevens Institute of Technology and MIT.

**Admission is free but registration is required.** For registration and directions go to [www.IEEE.LI](http://www.IEEE.LI), click on the Calendar link, and then click on the registration link for this event.

**Lecture coordinator:** Dave Mesecher, IEEE Communications Society LI Chapter Chair: [d.mesecher@ieee.org](mailto:d.mesecher@ieee.org)



# Uninterruptible Power Supplies

**Speaker: John Liguori**

MSEE, PE

**Wednesday, September 6, 2006 at 7PM**

*More details available on our web site at [www.licn.org/](http://www.licn.org/)*

## Who should attend?

Anyone that uses a PC or electronic devices and is interested in data and equipment protection. Those involved in the design of UPS Systems.

## Abstract:

Nowadays, everyone uses computers and electronic equipment. Getting by without access to your data would be difficult, if not impossible. Yet the data and equipment that stores and processes it, is susceptible to power line disturbances. An Uninterruptible Power Supply (UPS) can offer protection against many threats.

This presentation discusses the different types of Uninterruptible Power Supplies available, what the UPS protects against, the components of a UPS and the issues regarding selection and sizing. The different types and causes of power disturbances are

discussed, as well as what you can do, and what the power utility can do to minimize their effect.

## Speaker Biography:

John Liguori is an independent consultant in the field of electrical engineering. He received his MSEE from Polytechnic University in 1989. Mr. Liguori has a broad background in analog and digital design, having worked or consulted for companies such as Telephonics, L3 Communications, Veeco, Herley, Firecom, Tacronics and others. He has spent the last 20 years developing and designing circuits and systems in various fields including radar, air traffic control, video and displays, satellite communications, industrial measurement, and RF / microwave products. Mr. Liguori also is an instructor teaching in the professional engineering review program at Hofstra University.

**Program Coordinator: John Dunn**

## Location:

Briarcliffe College - The Great Room  
1055 Stewart Avenue, Bethpage, NY 11714

**Directions: See map on LICN**

**web site: [www.licn.org](http://www.licn.org)**

## Registration:

The presentation is free and open to the public. Please register by visiting [www.ieee.li/calendar.htm](http://www.ieee.li/calendar.htm), click on the registration link and fill out the form. PE CEU's are available by following instructions on the registration page.

The presentation is wholly the responsibility of the IEEE Long Island Section and the speakers. For further information, contact the coordinator by email at [ambertec@ieee.org](mailto:ambertec@ieee.org) or by telephone at 516-378-2149.

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The Long Island Chapter of the IEEE Microwave Theory & Techniques Society is presenting a lecture titled

## New Configurations for RF/Microwave Filters

**Speaker: Harish Peddibhotla**  
CST

**Tuesday, September 26, 2006 at 6:30 PM**

*(This lecture is free and all are invited.  
Refreshments will be served at 6:00 PM.)*

### Abstract

New configurations for RF/microwave filters are presented using a folded-transmission line methodology. This new approach yields interesting advantages over conventional stub-loaded designs, which include greatly reduced real estate requirements and more practical aspect (trace width to height) ratios.

The design approach of the folder filters is reviewed. Several design examples are presented to highlight the advantages of the folded topology over the conventional method. S-parameter comparisons are also presented which illustrate the performance similarity of the two approaches. For completeness, the comparison data is derived from the theoretical response, and validated by full-wave EM simulation, as well as with measured data.

### Location

This lecture will be held at Telephonics Corporation located at 815 Broad Hollow Road in Farmingdale. Refreshments will be served starting at 6:00 PM, and the presentation will begin at 6:30 PM. (Please try to join us early and enjoy networking with your colleagues.) The lecture is scheduled to last 60-90 minutes. The lecture is free and all are invited, however registration is required. A photo ID is needed to enter the facility.

### Registration

Registration is required, and is available online only. Please visit the calendar page of the IEEE Long Island Website [www.IEEE.LI](http://www.IEEE.LI), click on the registration link, and fill out the form.

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# IEEE Long Island Section CALENDAR

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no fees at meeting unless otherwise noted.  
Please visit our website at [www.IEEE.LI](http://www.IEEE.LI) and click on the calendar  
for online registration (as available) and for listing updates.*

### September 6, 2006: 7:00PM

**Uninterruptible Power Supplies** by Mr. John Liguori, MSEE, PE. A lecture sponsored by the IEEE Consultants Network of Long Island will be held at Briarcliffe College, The Great Room, 1055 Stewart Avenue, Bethpage, NY. The meeting is open to the public and no pre-registration is required. See page 7 for details. Contact John Dunn at [ambertec@ieee.org](mailto:ambertec@ieee.org) or at 516-378-2149

### September 7, 2006 6:00PM - 9:00PM

**COMSOL Multiphysics**, Dr. Hazem Tawfik, Director The Institute for Research and Technology Transfer (IRTT) at Farmingdale State University announces a FREE Workshop on the Utilization of COM-SOL Multiphysics Computer Simulation Software. Presented by Konrad Juethner. Lupton Hall, Room 165 Farmingdale State University. For further information: Contact Dr. Tawfik directly at [tawfikhh@FARMINGDALE.EDU](mailto:tawfikhh@FARMINGDALE.EDU)

### September 20, 2006: 6:00PM

**Joint IEEE/AIAA/ASME/ISA/SWE lecture on the History of Aviation on Long Island**, by Bob Klein, VP Engineering, Northrop Grumman Corp., SUNY Farmingdale. Contact Dave Mesecher at [d.mesecher@ieee.org](mailto:d.mesecher@ieee.org).

### September 26, 2006: 6:00PM

**MTT Society Meeting - New Configurations for RF/Microwave Filters**, by Harish Peddibhotla. Refreshments & lecture begins at 6:30PM, Telephonics Farmingdale, LI.

### September 27, 2006: 6:00PM

**CAS Society Meeting - Mixed-Signal Systems-on-Chip: Architectures & Design Tools**, by Alex Doboli. Refreshments & lecture begins at 6:30PM, Telebyte Greenlawn, LI.

### October 4, 2006: 7:00PM

**Long Island Consultants Network Meeting** - Briarcliffe College (The Great Room) Bethpage, LI.

### October 10, 2006: 6:00PM

**Overcurrent Protection Design** presented by Carl Lindquist of San-O Industrial Corporation. A lecture,

sponsored by the IEEE EMC Society, will be held at BAE Systems Inc, 450 Pulaski Road Greenlawn, NY. Registration and refreshments at 6 PM and the lecture begins at 6:30 PM. The lecture is open to US citizens, but registration is required- see page 6 for details. Contact the lecture coordinator, Santo Mazzola at [mazzolas@ieee.org](mailto:mazzolas@ieee.org) or at 631-262-8367.

### October 12, 2006: 6:30PM

**National Missile Defense**, Larry Chasteen, Distinguished Lecturer of the IEEE Aerospace & Electronic Systems Society. Joint IEEE AESS/AIAA lecture will be held at Farmingdale State University, Farmingdale, NY. The lecture is open to the public, but registration is required. See page 11 for details. Contact lecture coordinator, Rich Pierro, at [rspierro@optonline.net](mailto:rspierro@optonline.net) or 516-628-3156.

### October 30, 2006: 6:00PM

**EXCOM Meeting** - Telephonics Farmingdale, LI

### November 3, 2006 CALL FOR PAPERS

**Annual IEEE Long Island Systems, Applications, & Technologies Conference** - to be held on May 4th, 2007 at SUNY Farmingdale. 300-word abstracts are due by November 3.

### November 15, 2006: 6:00PM

**Introduction to MIMO - Theory & Applications**. An evening lecture by Jacob Sharony of SUNY Stony Brook's Center for Excellence in Wireless and Information Technology. Contact Dave Mesecher at [d.mesecher@ieee.org](mailto:d.mesecher@ieee.org).

### November 30, 2006: 6:00PM

**The Digital TV (DTV) Revolution**. A lecture by Bruce Willins, VP of Engineering and Marketing, Hauppauge Electronics. SUNY Farmingdale. Contact Dave Mesecher at [d.mesecher@ieee.org](mailto:d.mesecher@ieee.org).

### January 18, 2007

**CEWIT 2007 - Annual Technology Conference at SUNY Stony Brook**. Abstracts due Oct 15th. Go to [www.cewit.org](http://www.cewit.org) or contact Dr. Lisa Chichura of SUNY Stony Brook at [lisa@ee.sunysb.edu](mailto:lisa@ee.sunysb.edu).



## LECTURE

The Long Island Chapter of the IEEE  
Circuits & Systems (CAS) Society is presenting a lecture titled

# Mixed-Signal Systems-on-Chip: Architectures & Design Tools

**Speaker: Dr. Alex Doboli**  
Stony Brook University

**Wednesday, September 27, 2006 at 6:30PM**  
(This seminar is free and all are invited. Refreshments will be served.)

**0.2 CEU Credits See Registration on-line**

### Who Should Attend?

Engineers interested in circuits and systems theory and design.

### Abstract

Mixed-signal systems-on-chip (SoC) technology has rapidly evolved in recent years allowing the including on a chip of programmable analog and digital circuits in addition to CPU cores, memory, and I/Os. Programmable mixed-signal SoCs can be customized in short time and at low cost to implement new functionality and performance requirements. On the other hand, SoC based design has a steep learning curve due to the cross-disciplinary nature and complexity of the process. Design automation tools aide not only in reducing design effort and time, but also in the easier tackling of the cross-disciplinary nature of the design. In this seminar the speaker will present the main aspects of mixed-signal SoC architectures, and discuss present solutions and challenges in fully automating the mixed-signal SoC design process.

### Speaker Biography

Dr. Alex Doboli is Assistant Professor at the Department of Electrical and Computer Engineering, Stony Brook University, Stony Brook NY. His research is in design automation of mixed-domain electronic systems, including mixed-signal and hardware-software embedded systems. Specifically, he studies methodologies and techniques for automated design of analog and mixed-signal systems, modeling of analog circuits, and design of performance-optimized embedded SoCs. He is author of more than 80 research papers. Dr. Doboli received the Ph.D. degree in Computer Engineering from University of Cincinnati, Cincinnati, OH and the M.S. and Ph.D. degrees in Computer Science from "Politehnica" University Timisoara, Timisoara, Romania. He is a Member of the IEEE, SIGDA and SigmaXi.

### Location

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### For Driving Directions

[http://www.telebyteusa.com/driving\\_directions.htm](http://www.telebyteusa.com/driving_directions.htm)

Note: We are just west of BAE on the North side of Pulaski Road

### Registration

Registration is required and is available on-line. Please visit the calendar page of the IEEE Long Island Website [www.IEEE.LI](http://www.IEEE.LI) click on the registration link and fill out the form.



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## WORKSHOP

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## CALL FOR PAPERS AND EXHIBITORS

Last year's successful conference featured contributed papers that were presented in three parallel sessions: Systems, Applications, and Technology. Technical papers describing research development and application on a broad range of electronic and electrical engineering topics are solicited for LISAT2007. Please send qualifications of your expertise in order to speak on said topic.

All paper submissions must include title and a 300 to 500 word summary, the speaker(s) full name, affiliation, address, phone number and email address and a 1/3 page long biography. Submissions should be emailed to the LISAT Technical Program Co-Chairmen, Dave Mesecher at [d.mesecher@ieee.org](mailto:d.mesecher@ieee.org) and Daniel Rogers at [drogers@ieee.org](mailto:drogers@ieee.org), as well as Jesse Taub, Technical Program Consultant, at [jjtaub@aol.com](mailto:jjtaub@aol.com). Papers will be accepted based on their originality, quantitative content, clarity, and interest to IEEE members.

The deadline for paper submissions is December 1, 2006. You will be notified of acceptance or rejection on or before January 10, 2007 and will be given instructions for electronic submission of your full paper which is due by February 15, 2007. One author of each paper must register for the Conference and will be expected to provide a 40 minute PowerPoint

presentation at the conference followed by 10 minutes of Q&A. Presented papers will be part of the CD-ROM Conference Proceedings to be given to each attendee and will become part of the IEEE Xplore database.

While LISAT welcomes a wide variety of papers in systems, applications and technology, some examples of topics of particular interest are:

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- Antenna Systems & Processing
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- Medical Electronics

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IEEE copyright form (signed by the submitting author) must accompany the final manuscript of each accepted paper.

For information on Exhibiting at LISAT, please contact: Fred Kruger at [f.m.kruger@ieee.org](mailto:f.m.kruger@ieee.org) or Mark Sadick at [mark@sagharborind.com](mailto:mark@sagharborind.com) and/or Tel: 516-967-2970

**FOR ALL OTHER INFORMATION** contact LISAT2007 Conference Chair: Dr. Charles Rubenstein at [c.rubenstein@ieee.org](mailto:c.rubenstein@ieee.org) or Conference Vice Chair: Dr. Babak Beheshti at [b.beheshti@ieee.org](mailto:b.beheshti@ieee.org)

LISAT is sponsored by the **IEEE Long Island Section** and its Technical Society Chapters, and **IEEE Region 1** in cooperation with the **Institute for Research & Technology Transfer (IRTT)** at **Farmingdale State University**

LISAT has successfully offered Continuing Education Units (CEUs) valid in the State of New York for the last two years. Again for LISAT 2007, the Committee intends to apply for authorization to award Continuing Education Units valid in the State of New York.

### HISTORY CORNER

## 30 YEARS AGO

Rod Lowman, Historian

Politics frequently puts strong requirements on electronics. Thirty years ago it was the demand for multiple TV and radio transmissions from the Democratic National Convention in New York. Mr. Thomas Hayden, assigned by AT&T as the Convention Manager for communications, described the year of advance planning to make certain that all needs were addressed.

As important as communications are to the Democratic Party, the many state delegates, and the many candidates, their needs are less than half of what the media – radio and TV broadcasters, wire services, newspaper and magazines require. Most of the video went directly from Madison Square Garden to the broadcasters' control centers. From there, and their studios, the video went to the Empire

State Building for local transmission and over Long Lines for the rest of the country.

For on the spot interviews with candidates and other key figures at remote locations like airports, etc., a special N.Y. Telephone radio group played a key role. Using underground cable and above ground microwave equipment, the 50 radio men assigned to the convention reported video from all over the city as needs arose.

The largest single group at the convention was the print media which primarily needed telephoto, teletypewriter and data circuits. There were also teletypewriters on the podium, feeding other teletypewriters at their hotels, and scores more at the Felt Forum and the Governor's Exhibition Hall.

With more than 20 years experience with AT&T in many different area, Mr. Hayden

was well equipped to handle the communications and describe the operation.

This year and next the political demands will be on the selection, purchase and delivery of equipment to properly record and report the voting for all the candidates. The federal government has provided much of the funds but it up to the states and counties to implement the new system. To be implemented in 2006, New York, as usual, is late and will hopefully be ready for next year. Last month Suffolk held a meeting to review a half dozen possible equipment that may be chosen. They hoped to get voter evaluation to help decide the best to order. It will be a busy year, making a choice, getting the equipment, training the inspectors of election to handle the equipment and instruct voters on the use of the equipment. Let's hope we make it.



The Long Island Chapter of the IEEE Aerospace & Electronic Systems Society  
and The Long Island Chapter of the AIAA Present

# **NATIONAL MISSILE DEFENSE**

**October 12, 2006, Lecture at 6:30 – 7:45 PM**

**Registration & Coffee/Tea/Cookies at 6 PM**

## **Location**

**Farmingdale State University**

**2350 Broadhollow Road (Route 110), Farmingdale, NY**

**Lupton Hall, Room T101**



A Lecture by  
Larry Chasteen, PhD, PE  
Distinguished Lecturer of the AESS

## **Lecture Content**

The United States Government (Bush Administration) made major changes to the limited National Missile Defense (NMD) system that was proposed earlier by the Clinton Administration. Even with the new national emphasis on anti-terrorism and closer relations with Russia, NMD is still a very controversial topic as seen with the recent US proposal to withdraw from the Anti-Ballistic Missile (ABM) treaty. The NMD program will continue to be a key technical, political, and legislative issue facing the U.S. and the rest of the world. The Bush Administration's NMD program focuses more on testing and developing new parts to the NMD system. The NMD system will still operate as an integrated system but will investigate

a wider variety of sensors (such as space-based and sea-based) to detect and track incoming missiles. The upgrade to the existing Early Warning Radars (EWR) is one of the few features that has not changed from the proposed Clinton plan. This talk will provide background and technical information on the upgrades to the EWRs. The talk will also provide program and system engineering details on the new proposed testing of the total NMD system.

## **Speaker Biography**

Larry Chasteen was the 1998 Dallas IEEE Section Chair and received the IEEE 3rd Millennium Medal for his service to the IEEE. He was also the 2000 IEEE Congressional Fellow and worked on the National Missile Defense Program at the Library of Congress in Washington, D.C. He had previously worked for 25 years in the defense industry for Texas Instruments and Raytheon specializing in

radar and smart weapons. He also served in the Viet Nam War as a USAF B-52 pilot and just recently retired from the USAF Reserves with the rank of Colonel. He is now teaching Management and Entrepreneurship at the University of Texas at Dallas. His research concerns evolving technical communities and the processes of cluster formation.

## **Lecture Coordinator**

Rich Pierro, IEEE Long Island Section Aerospace & Electronic Systems Society Chapter Chairman.

## **Registration**

The lecture is open to the public, registration is required and is available online only. Please visit the calendar page of the IEEE Long Island website at [www.IEEE.LI](http://www.IEEE.LI), click on the registration link and fill out the form. The lecture is wholly the responsibility of the IEEE Long Island Section and the speaker.



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