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TIME SENSITIVE MATERIAL

CALENDAR OF EVENTS

For reservations call the IEEE office 255-3003
(unless otherwise indicated)

Copy Deadline for September Scanfax is July 25, 1988

MAY 24	Magnetic Recording	Consumer Electronics/ Acoustics Society	Cyprus Rest. Ogden Ave. @ I-294	Social: 6:00 PM Dinner: 7:00 PM Meeting: 8:00 PM
MAY 25	Satellite Communications	Fox Valley Subsection	Wilton Manor Schmale Road Wheaton	Social: 6:00 PM Dinner: 7:00 PM Meeting: 8:00 PM
JUNE 2	FAA Air Traffic Center Tour	Computer Society	Call Joe Feitler 979-8023	Meeting: 7:30 PM
JUNE 8	Central Distribution Control of Lighting Loads	IAS & IES	Mr. Peter's Restaurant Mt. Prospect, IL	Social: 5:30 PM Dinner: 6:30 PM Meeting: 7:30 PM
JUNE 9	Quantum Well Optoelectronic Devices for Telecommunications	LEOS	Amoco Research Center *social	*Social: 6:00 PM Meeting: 7:30 PM
JUNE 13	Electromagnetic Scattering From Anisotropic Structures	IA & PS & MT & TS Joint	Louis' Restaurant 351 E. Lake St. Addison, IL	Social: 5:30 PM Dinner: 6:30 PM Meeting: 7:30 PM
JUNE 14	Monthly Meeting All Welcome	IEEE Executive Committee	Allen Bradley Co. 910 Pasquinelli Dr. Westmont, IL	Meeting: 7:15 PM
JUNE 16	Computer-Aided Software Engineering Power Tools for System Developers	Computer Society	Amoco Building 200 E. Randolph Chicago, IL	Social: 5:30 PM Meeting: 6:30 PM
JUNE 16	Installation of New Officers	Reliability Chapter Annual Banquet, Dinner	Oak Brook Drury Lane	Meeting: 7:30 PM
JULY 12	Monthly Meeting	IEEE Executive Committee	To Be Announced	To Be Announced
JULY 23	Fun & Recreation	Reliability Chapter Annual Picnic	To Be Announced	To Be Announced
AUG. 9	Monthly Meeting All Welcome	IEEE Executive Committee	Allen Bradley Co. 910 Pasquinelli Dr. Westmont, IL	Meeting: 7:15 PM

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IEEE Lasers and Electro-Optics Society



* * * CHICAGO CHAPTER * * *

MEETING: Thursday, June 9, 1988

SPEAKER: Anthony L. Lentine, AT&T Bell Laboratories

TOPIC: Quantum Well Optoelectronic Devices for Telecommunications

ABSTRACT

Quantum well optoelectronic devices have generated considerable interest in recent years, because of their potential in fiber optic communications and telecommunications switching. Dr. Lentine will first discuss the basic operation of the electro-absorptive quantum well p-i-n modulator, and then focus on quantum well self electro-optic effect devices (SEEDs). Several types of SEEDs and their applications will be discussed.

Social/Dinner: * 6:00 PM @ Connie's Pizza, 1170 E. Iroquois Dr., Naperville
Technical Presentation: 7:30 PM @ Amoco Research Center, Warrentville Rd., Naperville

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ISSUE	COPY DUE	MAILED ON
Sept	July 25	Aug 15
Oct	Aug 29	Sept 15
Nov	Sept 26	Oct 15
Dec	Oct 31	Nov 15
Jan 89	Nov 28	Dec 15
Feb	Dec 26	Jan 15
Mar	Jan 30	Feb 15
Apr	Feb 27	Mar 15
May	Mar 27	Apr 15
June	Apr 24	May 15

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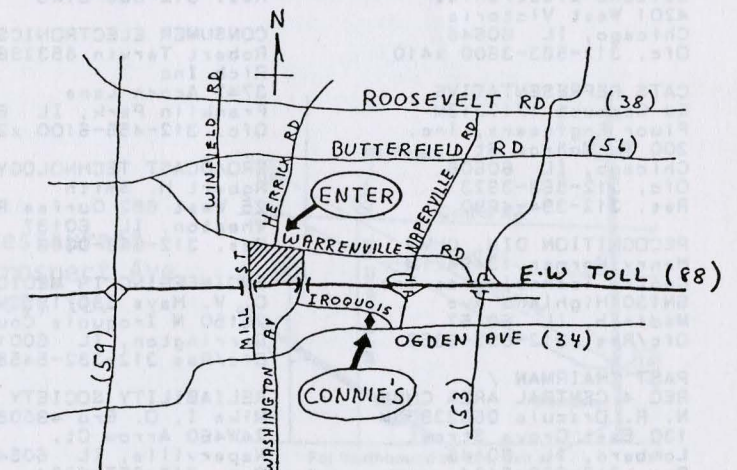


Connie's Pizza



Amoco Research Center

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* Cost for the pizza and beverages at Connie's is \$6.00 per person. There is no charge for attending the technical presentation. Advance dinner reservations should be made by calling Judy Larsen or Carolyn Glandt at 255-3003 before June 7, 1988. Please let Judy or Carolyn know (by June 9, Noon) if you plan to attend the technical presentation only.



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INDUSTRY APPLICATIONS SOCIETY INDUSTRIAL ELECTRONICS SOCIETY CHICAGO CHAPTER

TECHNICAL MEETING - JUNE 8, 1988

Topic: CENTRAL DISTRIBUTION CONTROL OF LIGHTING LOADS

Guest Speaker: John Wozniak P.E.
Vice President - Application Engineering
Lee Butter & Associates

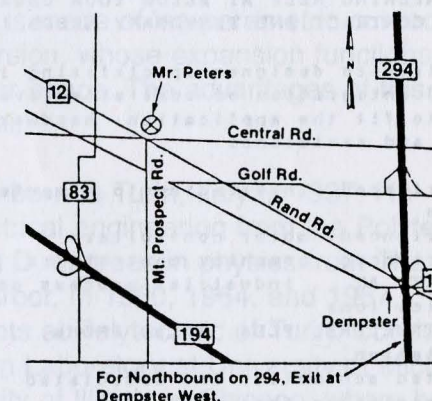
John Wozniak has over 30 years experience in the area of electrical manufacturing, representation and consulting. Mr. Wozniak received his Electrical Engineering degree from the Chicago Technical College and is registered in 3 states. Mr. Wozniak is past President of the Chicago Section of the Illuminating Engineering Society.

Mr. Wozniak will examine the energy conservation area in general with specific emphasis on how to reduce high electric costs through central distribution control of lighting loads. Mr. Wozniak will discuss the various microprocessor based control systems available which can perform tuning (power usage reduction) on fluorescent and incandescent lamp circuits without reducing the lighting effectiveness. In most cases the power factor will either remain the same or improve which may reduce the harmonic distortion found in many power distribution systems.

Social: 5:30 P.M.
Dinner: 6:30 P.M.
Meeting: 7:30 P.M.
Location: Mr. Peters Restaurant
1018 Mount Prospect Ave.
Mount Prospect, IL.

Reservations:

Please call Judy Larson at Association Management (255-3003) by Tuesday, June 7, 1988 for reservations. The cost of the dinner is \$13.00. There is no charge for attending the meeting only. Guests are welcome.



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JOINT CHICAGO CHAPTER OF IEEE ANTENNAS & PROPAGATION SOCIETY AND MICROWAVE THEORY & TECHNIQUES SOCIETY JUNE 1988 MEETING NOTICE

ELECTROMAGNETIC SCATTERING FROM ANISOTROPIC STRUCTURES

By: Dr. Piergiorgio L. E. Uslenghi

DATE: Monday, June 13, 1988

PLACE: Louis' Restaurant, 351 E. Lake Street
Addison, Illinois
(First traffic light west of Route 83)

TIME: Social – 5:30 PM
Dinner – 6:30 PM
Meeting – 7:30 PM

ABSTRACT: Integro-differential equations are obtained for the electric and magnetic fields inside a linear, lossy and anisotropic scatterer, in the frequency domain. The material of the scatterer is characterized by arbitrary, position-dependent elements of the permittivity, permeability and conductivity tensors. Specific numerical results are presented for circular and elliptic cylinders, and for layered cylindrical shells with and without a metallic core, with the use of a numerically efficient computer code for oblique scattering in two dimensions. The scattering from three-dimensional anisotropic structures is considered. Use is made of iso-parametric curved elements with quadratic distortion, whose expansion functions are of second degree in parameter space. The advantages of this method are discussed in detail.

SPEAKER: Piergiorgio L.E. Uslenghi was born in Turin, Italy in 1937. He received the doctorate in electrical engineering from the Polytechnic of Turin, and the M.S. and Ph.D. degrees in physics from The University of Michigan, Ann Arbor, in 1960, 1964, and 1967, respectively. After appointments at Polytechnic of Turin, Conduction Corporation, and the Radiation Laboratory at University of Michigan, in 1970 he joined the University of Illinois at Chicago, where he is a Professor of Electrical Engineering and Computer Science. He has published several books and numerous papers in electromagnetic theory, microwaves, antennas, modern optics and applied mathematics. Dr. Uslenghi is a member of Phi Beta Kappa, Sigma Xi, URSI Commission B, and a Senior member of IEEE.

The dinner is optional. A reservation is helpful even if you plan to attend the talk only. Reservations may be made by calling 255-3003 before noon on Friday, June 10, 1988. Non-members are welcome.

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A local chapter of the Electrical Overstress/ Electrostatic Discharge (EOS/ESD) Association is being formed in the Chicago area. Persons interested should contact Karen Callies at 480-7887 or Liz Arendt at 228-6360 for further information.

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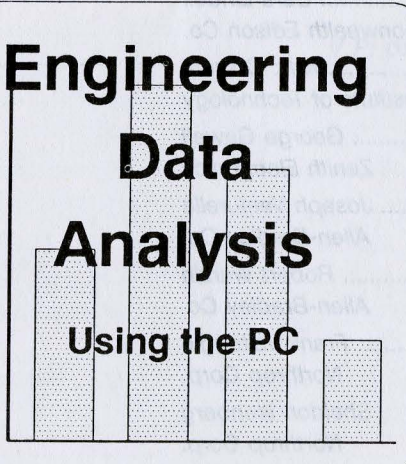
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002

MONTHLY REPORT FROM YOUR SECTION VICE CHAIRPERSON

Right now, the Recognition Dinner still is a recent experience – "HATS OFF" to Hank Korman and his committee for arranging this highly successful event for our members and honorees.

If your Subsection/Chapter is changing its officers at mid-year, be sure to remind your Secretary to complete any missing Meeting Reports to ensure your getting your full 1988 meeting rebate; similarly, your Treasurer should submit a semiannual financial report according to our Section Bylaws.

A note to program planners: Please use an updated list of Section, Subsection, and Chapter Officers to arrange joint meetings for our new and for smaller Chapters – all of our members will benefit greatly from your cooperation, as well as the incoming officers struggling to plan really interesting meetings; your Section Officers and Committee people will support you upon request!

We want to wish Steve Sella, our Communications Society Chairman until now, much success in his new position at Motorola in Phoenix, AZ. We'll miss you.

On the financial side, our Section Chair Ed Barrett has volunteered to handle the business aspects of our SCANFAX operations to reduce our Chicago IEEE Office Costs, but our telephone answering and reservations services to our members will continue as before. We are still reviewing our efforts for helping our unemployed members via SCANFAX, in addition to considering other feasible SCANFAX cost savings. For example, we will continue to monitor the current developments in Electronic Publishing techniques to plan their future use with SCANFAX as a cost-beneficial improvement.

We just upgraded our Section PC's RAM size from 640K to 2 Megabytes. This should allow us to add more accounts for our new Chapters and to keep an entire year's accounts on-line instead of only a three month period.

Your phone calls to 979-8023 (or as referrals from our Chicago IEEE Office) are stimulating. In a few cases, a referral to a Chapter Chairperson or to IEEE's publications department seemed appropriate; however, most of the time the questions lead to immediate answers, such as how to select a meeting place, what its typical dinner cost will be, or how to reach a suburban meeting location from downtown Chicago.

Keep us posted on your interests and concerns as Section Members so we can serve you better.

Joe Feitler

One of our members, Will Chatt, provided us with copies of two recent letters on the types of awards and "Portable Pensions." They appear below. Will is awaiting their respective responses. We welcome our members' opinions, pro and con.

Incidentally, during a telephone conversation I did mention last year's Career Planning Seminar based on IEEE's Program "Careers - Phase II" which we conducted as a Section Meeting in September 1987. Another Section Meeting for September 1988 has been in the planning stage for several months.

We also agreed on the fact that the IEEE Fellow Grade seems reserved for predominantly technical achievements (publications, patents, technical leadership in the academic and business world), with no real equivalent for professional achievements in leading the Chapters and Sections bearing the major responsibility for bringing IEEE's services to its members at the grassroots level. In many instances, the Section/Subsection/Chapter Officers and Committee people devote exceptional skills and much time to these efforts for which there appears to be a dearth of IEEE awards.

The topic of "Portable Pensions" merits also our special attention. The recent change in limiting the deductibility of our IRAs came to our attention quite forcefully while preparing our Federal Income Tax returns. IEEE fought hard to help us get IRAs which became available around 1976, yet we did not hear much about IEEE's efforts prior to the passage of the Tax Reform Act. Here we had a useful form of Portable Pensions for our members working in an environment of relatively frequent job changes, which suddenly lost much of its economic value in planning for a retirement income. Will IEEE help us regain this important fringe benefit involving tax-deferred income for us?

Joe Feitler

Letter 1 - To Mr. Donald Christianson, Editor-in-Chief of THE INSTITUTE

Dear Mr. Christianson:

The IEEE sponsors numerous awards for great and skillful accomplishments in the fields of electrical and electronic engineering.

In the March and April issues of THE INSTITUTE the 1988 Field Awards covered fourteen technical categories. High level scientific award stories filled 25% to 30% of the April issue.

Awards for engineering achievements should be recognized and by no means do I think that the IEEE should lessen this type of activity.

However, would it not be appropriate for the IEEE to give some recognition and not just lip service to engineers who try to help engineers as human beings? For instance, the USAB has a Pensions Committee. Occasionally an article is written such as in the April issue about "Understanding Pensions." This is fine, but do we have an award to be given to an Engineer who really does something to advance Portable Pensions? Or for that matter is there an award for any other activity that would be of benefit to the flesh and blood engineer?

Most engineers are fine, solid human beings who love their families and work hard every day to support themselves and [their] families. Would it not be appropriate to honor and present an award to engineers who make the engineering profession a more secure and satisfying career?

In our local chapters do we ever conduct a program to enhance the individual engineer? If the local chapter invited a speaker from the USAB to discuss Tort Reform, Pensions or Professional Activities, would anyone attend? Are engineers concerned about their own well being?

Since programs that might be of personal benefit to the average engineer occur very infrequently, I assume that our leadership feels that we don't care about ourselves. Is this how most engineers feel?

Sincerely

Willard J. Chatt

Letter 2 - To Mr. Ed Bernolli, Chair of USAB (IEEE's US Activity Board)

Dear Mr. Bernolli,

A copy of the enclosed letter-to-the-editor was given to our local USAB representative. He informed me that he felt most, if not all, of our Chicago membership want TECHNICAL PROGRAMS - period.

Personally I don't believe this, but I didn't argue the point. Again we have a situation that says, "You can't do this - it has never been done before." In my opinion this is why it takes so long for anything to happen. I refer to this type of situation or thinking as assuming an answer to a question before it is ever asked. Usually the assumed answer is wrong or at least the actual answer is a far cry from the assumption. End of Editorial.

Let's plan a USAB program for the Chicago Area (all Societies) next fall or winter. What general subjects are of most interest, i.e., Pensions, Tort Reform, etc? Since we are planning well in advance and since we haven't done this before, I think we should have a big show. Are you available as our star speaker? I assume that you would like to come to Chicago.

Please write soon. This sounds like a fun evening. I would like to help put the show on the road.

Sincerely,

Willard J. Chatt

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Ask for Lois or Marla

The Components, Hybrids, and Manufacturing Technology Society is seeking members interested in forming an active chapter in the Chicago Section. Interested members are urged to contact the CHMT Society Chapter Coordinator or Chicago Section Chairperson.

CHMT Chapter Coordinator

Section Chairperson

Dr. Susan Schlough
AT&T Bell Labs, Rm 1A-224
260 Cherry Hill Road
Parsippany, NJ 07054
201-299-3291

Ed Barrett
171 Warwick Dr.
Glendale Heights, IL 60139
W 312-455-6100 x488
H 312-653-9049

The Section is still looking for members interested in making the Vehicular Technology Chapter viable. This is a large chapter and to become active needs 3 or 4 members willing to put in a few hours a month to plan several meetings. The summer is an excellent time to start! If no one comes forward to help, everyone will miss out on the opportunities an active VT chapter could provide. If interested, please contact the Section Chairperson Ed Barrett or Vice Chairperson Joe Feitler.

FOX VALLEY TREASURER HONORED BY DARIEN CITY COUNCIL

The treasurer of the Fox Valley Subsection, Samuel Kelley, was honored by the Darien City Council early this year as the Darien "citizen of the year" for his many civic activities on behalf of the residents of Darien.

Kelley's involvement with Darien City Government started in 1957 when he moved to the then unincorporated area of Marion Hills. He subsequently became involved with incorporation of the city, and served as an alderman for many years. He has also been involved in Scouting and church activities.

Kelley's many activities outside the field of engineering should serve as an example for all engineers. Our responsibility to our community requires that we give of our expertise in problem solving as Kelley has done.

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CHICAGO CHAPTER OF THE IEEE COMPUTER SOCIETY

Come to a Tour of the FAA's Air Traffic Control Center in Aurora, IL

DATE: Thursday, June 2, 1988
TIME: 7:30 pm
PLACE: FAA Air Route Traffic Control Center in Aurora, IL
SPEAKER: Michael van Bakel
National Aerospace Systems Manager

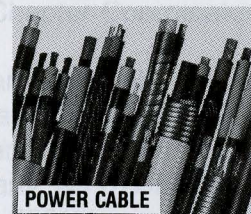
ABSTRACT: Our speaker will describe the new Host Computer System which was installed recently and its role in the busiest Air Traffic Control Center in the US. In addition we will see many other systems used by this important FAA installation and observe their operations during our guided tour. Based on reports from visitors for a similar IEEE tour earlier this year, this will be a most stimulating and interesting visit to the ARTCC.

DIRECTIONS: Take the Illinois Tollway (I-88) west to the Aurora exit at Route 31. Follow Route 31 south to Indian Trail Road and turn right (west). Continue past the large Mercy Hospital complex and a four-way stop sign until you reach the ATC guardhouse at a side road going north. There is an identifying sign there.

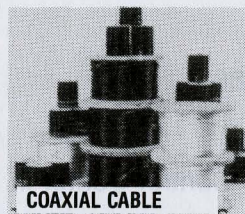
RESERVATIONS: Please call our IEEE Office (255-3003) to reserve your spot no later than noon on May 25, 1988 so we can arrange for a sufficient number of guides. Interested friends and co-workers – preferably prospective IEEE members – will be welcome. Therefore call us ASAP to avoid disappointment since we expect a large attendance. Conversely, please tell us about any change of plans before the deadline if we have to limit our attendance. Due to nature of the equipment we cannot accommodate children for this tour.

Please call Joe Feitler at 979-8023 if you need additional information or more detailed directions to the ARTCC.

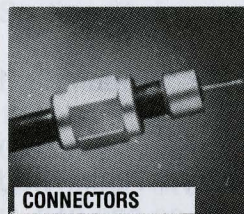
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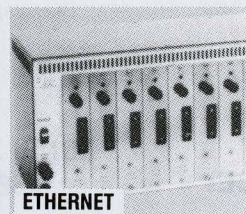
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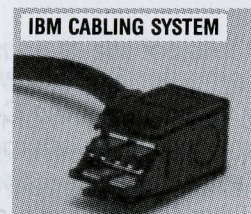
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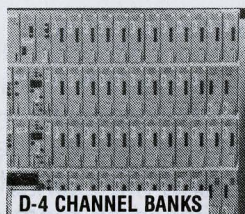
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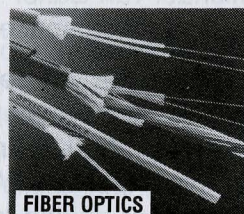
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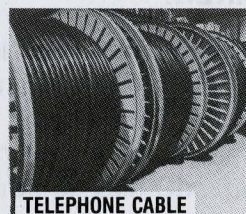
IBM CABLING SYSTEM



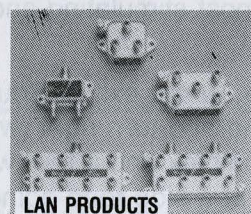
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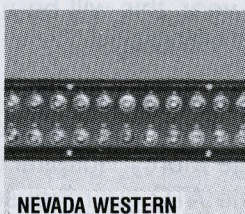
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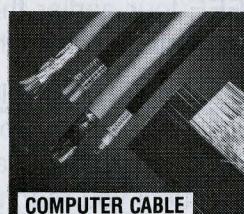
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A LETTER FROM YOUR EDITOR

The IEEE elections coming up this fall will bring members a clear chance to repudiate or endorse the actions of the IEEE hierarchy in changing the election rules without allowing the membership a voice in the matter.

A vote for either or both of the IEEE endorsed candidates will allow the leaders to continue their wasteful bureaucratic actions in Washington and New York. I receive more waste paper from IEEE than most members could imagine. Perhaps 5% is worth reading, the rest is garbage. The postage savings alone, if this was to be eliminated, would allow a \$5.00 yearly reduction in dues, most welcome since dues are no longer tax deductible, and few employers pay IEEE membership fees.

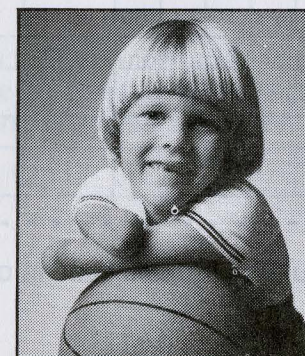
Irwin Feerst, the non-IEEE endorsed candidate is irascible, irreverent, and a general pain. But, he does represent the working engineer, and he would certainly shake up IEEE headquarters. In one year, he could wreak havoc, but he could also convince the hired hands in New York and Washington that the members want and need to be heard. If I were to tell you of the problems I have had with HQ as a chapter and society officer, you would understand why I believe HQ needs to be shaken.

Feerst deserves a chance to show if he can do what he says he wants to do. Therefore, I am urging all Scanfax readers to vote for Irwin Feerst in the upcoming election. Vote only for Feerst, to avoid giving support to either of his IEEE-endorsed opponents.

HR Hofmann
Scanfax Editor

We regret that there are no pictures of the Recognition Dinner. The photo processor developed the black & white film using color developer. The result was ruined negatives.

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**THE ASSOCIATION FOR COMPUTING MACHINERY (ACM) CHICAGO CHAPTER
AND
THE CHICAGO CHAPTER OF THE IEEE COMPUTER SOCIETY**

TOPIC: Computer-Aided Software Engineering — Power Tools for System Developers

ABSTRACT: Over the last twenty years, the "art" of information systems and scientific computer programming has been evolving into the engineering discipline of system development. This evolution gave birth to structured analysis and design techniques and project management techniques. Rapid advances in technology are ushering in a new era of Computer-Aided Software Engineering ("CASE"): the application of "power-tools" to help developers build and maintain software systems at a much higher level of productivity than feasible previously. This presentation covers the evolution of systems development and project management techniques; it will also provide a survey of computer-aided software engineering technology.

SPEAKER: Albert F. Case, Jr.
Director of Nastec Corporation's Consulting and Education Group

Mr. Case is responsible for ensuring the successful implementation and application of Nastec's computer-aided software engineering tools at many "Fortune 500" companies. Prior to joining Nastec he was Director of the Management Information Systems Division of Ryder Systems, Inc., where he had the primary responsibility for systems development efforts for the division's five operating subsidiaries.

DATE: Thursday, June 16, 1988

TIME: 5:30 PM - Cash Bar and Hors d'Oeuvres
6:30 PM - Speaker

PLACE: Amoco Building, second floor cafeteria
200 East Randolph Drive, Chicago

There is paid parking in building (enter from Stetson), as well as public street parking at lowest street level near Chicago Auto Pound.

Telephone reservations to Evelyn Marsh at 684-4962 before noon on June 15, 1988. Buffet cost: \$6.00 for ACM/IEEE members; \$7.00 for non-members.

To conform to IEEE's rules, the talk is free to IEEE members and their guests.

Please call Joe Feitler at 979-8023 if you need additional information.

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June will be my last full month as your Section Chairperson, and I'm grateful for the experiences and opportunities the position has provided. Certainly the success of the Section is due to the hard work of the volunteers on the Executive Committee and the Chairpersons of the Section's various Subsections and Chapters. For all their help, cooperation and guidance I am very grateful.

Next year's officers have a considerable challenge. Financial resources are dwindling as a result of reduced income from MIDCON. The Section officers want to continue to provide the services you have come to expect from the Section while continuing to operate in a financially responsible manner. Our sources of income are limited and the Section faces some real changes in operation in the next several years. More volunteer help will go a long way in keeping the Section viable.

STAY TUNED: Mark your calendars now for the September kick-off meeting, a joint meeting of the Section chapters and Subsections. This will be an exceptional meeting on Engineering Ethics to be held Tuesday, September 27, 1988 at Mr. Peter's Banquets. Watch the September SCANFAX for details.

Thanks for a good year;

Ed Barrett

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August 30 - September 1, 1988

**Dallas Convention Center
Dallas, Texas**

PRELIMINARY PROGRAM

A partial list of technical sessions follows:

Sponsored by IEEE Dallas Chapters

Computer Society

- Introduction to Neural Networks
- Applying Neural Networks
- Design Automation
- Floating-Point Arithmetic Solutions for Advanced Microprocessors

Aerospace and Electronic Systems Society

- Radar Seekers in Missile Applications

Circuits & Systems/Control Society

- Control Systems and Robotics

Power Engineering Society

- Test Circuits for High Power Pulsed Components

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Communications and Vehicular Technology Society

- Future Prospects in the Realm of ISDN and B-ISDN
- Simulating Complex System Architectures

Electron Devices Society

- Solid State Technology
- ASIC Design

Lasers and Electro-Optics Society

- Interferometry

Acoustics, Speech and Signal Processing Society

- Digital Signal Processing

Electromagnetic Compatibility Society

- EMC — Compatibility within the Electromagnetic Environment

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GENERAL ADMISSION includes admission to technical sessions, film and exhibition. For IEEE members, complimentary preregistration, \$10 on site.

TUTORIALS will offer an opportunity for in-depth learning. The one-day courses are not included in the general admission fee. A preliminary list of tutorial topics follows:

- Project Management: For Small to Medium Projects
- How to Develop an Expert System
- Grounding and Shielding of Electronic Instrumentation
- RISC Microprocessors for Silicon GaAs
- Stress Management for Hi-Tech Performance
- Digital Signal Processing : Application in EW Receiver Design
- Motivation for Performance and Productivity

For a copy of the complete preview program that includes additional information about the technical sessions and a list of exhibiting companies, contact:

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