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## TIME SENSITIVE MATERIAL

### CALENDAR OF EVENTS

For reservations please call IEEE Office at (708) 963-3828 before the stated deadline  
Copy Deadline for December SCANFAX is October 28, 1991

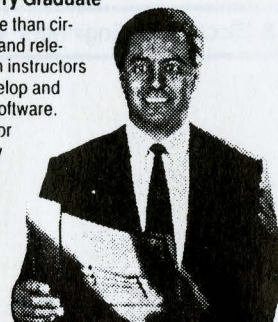
|                                     |                                              |                                                                                   |                                                                       |                                                        |
|-------------------------------------|----------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------|--------------------------------------------------------|
| November 12<br>Tuesday              | Chicago Section                              | Executive Committee                                                               | Contemporary Controls<br>2500 Wisconsin<br>Downers Grove, IL          | Meeting: 7:15 PM                                       |
| November 12<br>Tuesday              | Fox Valley Subsection                        | FAA Tour<br>of ARTCC in<br>Aurora                                                 | ARTCC - FAA<br>619 Indian Trail<br>Aurora, IL                         | Call for<br>Reservations<br>(708)963-3828              |
| November 13<br>Wednesday            | Communications<br>Society                    | Overview: Commercial<br>Air-To-Ground<br>Communications                           | Sharko's Restaurant<br>2225 Ogden Avenue<br>Lisle, IL                 | Social: 6:00 PM<br>Dinner: 7:00 PM<br>Meeting: 8:00 PM |
| November 13<br>Wednesday            | Power<br>Society                             | Littelfuse Plant Tour<br>and Test Station<br>Demonstration                        | Littelfuse Headquarters<br>800 East Northwest Hwy.<br>Des Plaines, IL | Social: 6:00 PM<br>Dinner: 6:30 PM<br>Meeting: 7:15 PM |
| November 13<br>Wednesday            | IAS/IES                                      | Effective Delegation<br>for<br>Project Handlers                                   | Hackney's on Lake<br>1514 East Lake Ave.<br>Glenview, IL              | Social: 5:30 PM<br>Dinner: 6:30 PM<br>Meeting: 7:30 PM |
| November 13<br>Wednesday            | Electron Devices/<br>Northwest<br>Subsection | Laser Gate Arrays:<br>Interconnection Technology for<br>Telecommunication Systems | Wilton Manor<br>Schmale Road<br>Wheaton, IL                           | Social: 6:00 PM<br>Dinner: 7:00 PM<br>Meeting: 8:00 PM |
| November 14<br>Thursday             | Computer<br>Society                          | IBM PC Software<br>for<br>MSDOS                                                   | Wilton Manor<br>Schmale Road<br>Wheaton, IL                           | Social: 6:00 PM<br>Dinner: 7:00 PM<br>Meeting: 8:00 PM |
| November 14<br>Thursday             | Chicago Section<br>Student Activities        | Career<br>Workshops                                                               | UIC<br>Chicago, IL.                                                   | Call for Details<br>(312)294-7784                      |
| November 20<br>Wednesday            | LEOS                                         | Vertical Cavity<br>Lasers and<br>Microresonators                                  | Sharko's Restaurant<br>2225 Ogden Avenue<br>Lisle, IL                 | Social: 6:00 PM<br>Dinner: 7:00 PM<br>Meeting: 8:00 PM |
| November 20<br>Wednesday            | EMC<br>Society                               | Ferrite Beads and<br>Related devices:<br>Application and Design                   | AT&T Bell Labs<br>2000 N. Naperville Rd.<br>Naperville, IL            | Social: 7:15 PM<br>Meeting: 7:30 PM                    |
| December 9 & 10<br>Monday & Tuesday | Chicago Section and<br>The Lendman           | IEEE Employment<br>Job Fair                                                       | Radisson Suite Hotel<br>5500 North River Rd.<br>Rosemont, IL.         | Call for<br>for Details<br>(800)562-2820               |

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Len Martinez, 3M Corporation, 1977 DeVry Graduate

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## SCANFAX DEADLINES

| ISSUE  | COPY DUE | MAILED ON |
|--------|----------|-----------|
| DEC    | OCT 28   | NOV 15    |
| JAN 92 | NOV 27   | DEC 15    |
| FEB    | DEC 20   | JAN 15    |
| MAR    | JAN 28   | FEB 15    |
| APR    | FEB 25   | MAR 15    |
| MAY    | MAR 25   | APR 15    |
| JUNE   | APR 28   | MAY 15    |

**THESE ARE FIRM DEADLINES FOR ADS AND COPY!!!**

## STUDENT ACTIVITIES

The classroom support materials for the DISCOVER E Program will be available in October. We are coordinating our efforts with the Society of Professional Engineers. We still need volunteers for Metropolitan Chicago.

CAREER WORKSHOPS are designed to assist students in areas critical to their job search. The next workshop is scheduled as follows:

UIC November 14

For further information on either of these programs, please contact Mary Hart at:

Commonwealth Edison

SEED 836 E

P.O. Box 767, Chicago, IL 60690

312 294-7784 312 924-8831 FAX

## IEEE MEETING NOTICE

### CHICAGO CHAPTER — IEEE EMC SOCIETY

**DATE:** WEDNESDAY — NOVEMBER 20, 1991  
Refreshments 7:15 P.M.  
Meeting 7:30 P.M.

**LOCATION:** AT&T BELL LABORATORIES  
2000 N. Naperville Road  
Naperville, Illinois

**SPEAKER:** TDK CORPORATION OF AMERICA  
**TOPIC:** Practical Application and Selection of Ferrite Beads and Related Devices for Compliance Design

For Reservations & Directions: Call IEEE Office 708-963-3828

## IEEE JOB FAIR PLANNED FOR DECEMBER

It would appear that the news reports suggesting the end of the recession have failed to influence employers to increase their hiring of engineers and other technical people. As always, the experts tell us that good jobs are out there waiting to be filled, but it is quite evident to anyone conducting a job search that the current supply of job seekers is far greater than the number of positions available. Job seekers are encouraged to "network" with friends, relatives, and associates in order to discover the so-called "hidden job market". It is a fact that many excellent positions are not announced to the general public but, rather, get filled from the inside through the promotion of an existing employee or through a referral from an employee. Getting in touch with positions which go unadvertised is what networking is all about.

The job fair is one of the most useful methods of networking. **The IEEE Chicago Section will be sponsoring a job fair at the Radisson Suite Hotel - O'Hare Airport, 5500 North River Road, Rosemont, Illinois on December 9 and 10, 1991, between the hours of 3:00 p.m. and 8:00 p.m. each day.** IEEE members who are conducting a job search, or who are considering doing so, are invited to attend. No pre-registration is necessary; just show up any time during the operating hours of the program. We recommend arriving at least one hour before the end of the session in order to see each of the companies in which you have an interest. The program is being offered to IEEE members free of charge. The event is being produced for The IEEE by The

Lendman Group of Virginia Beach, Virginia, the nation's oldest and largest job fair producer.

Here are some suggestions from The Lendman Group which can help you derive maximum benefit from the job fair.

### IEEE JOB FAIR

**Monday, December 9, 1991  
and  
Tuesday, December 10, 1991**

**3:00 p.m. to 8:00 p.m. each day**

**Radisson Suite Hotel -  
O'Hare Airport  
5500 North River Road  
Rosemont, Illinois**

1. Bring approximately twenty resumes with you and leave one with any company that agrees to accept it.

2. Talk to every company representative. Each company will be headquartered in a suite at the Radisson Suite Hotel. Don't be reluctant to walk into the suite and introduce yourself. It's not considered rude, and it will demonstrate your genuine interest in seeing that company.

3. If a company does not have an interest in you, ask the representative with whom you are talking to recommend any other companies that might have an interest. Recruiters mingle with other recruiters and may furnish valuable leads.

4. The same goes for other job applicants. If you must wait in line for a short time, strike up a conversation with the applicants around you. Job leads can, and frequently do, come from such conversations.

5. Sell yourself to the company representatives you meet. First, find out all you can about the specific requirements they seek. Then offer examples of how your background and experience fit.

6. Sell value! Don't talk in terms of what you did from 9:00 to 5:00; that's a position description. Tell what you have accomplished.

For a list of companies participating in the job fair, see the Employment classified section of **THE CHICAGO TRIBUNE** on Sunday, December 8th. All the information you will need in order to participate will be listed in our ad on that date. Good luck in your job search!

Companies which have current openings to fill will want to take advantage of this opportunity to meet with the best available technical talent the Chicago area has to offer. Information about corporate participation may be obtained from the Chicago IEEE Job Fair Coordinator at 1-(800) 562-2820. Companies in the process of downsizing are encouraged to inquire about offering a job search assistance program to their employees. Information about outplacement assistance may be obtained from Payne-Lendman, a division of The Lendman Group, at 1-(800) 562-2820.

# UIC The University of Illinois at Chicago

The University of Illinois at Chicago College of Engineering continues to help engineering professionals gain that needed extra edge by offering graduate-level courses at selected suburban locations.

Earning a Master of Science degree from UIC is convenient and manageable for the working professional since courses are taught close to home and office. Earn your MS degree in Mechanical Engineering (ME) or Electrical Engineering and Computer Science (EECS).

Our Spring Semester 1992 schedule of Off-Campus classes:

- ME 408 *Intermediate Vibration Theory*
- ME 417 *Intermediate Fluid Mechanics*
- ME 447 *Introduction to Computer-Aided Design*
- ME 521 *Heat Conduction*
- EECS 431 *Analog Communication Circuits*
- EECS 460 *Computer Algorithms*
- EECS 510 *Advanced Network Analysis*
- EECS 570 *Advanced Topics in Software Engineering*

Classes begin January 13, so why wait any longer when it's so easy to earn your MS degree? Call the Off-Campus Programs Office at 312/996-2311 for more information.

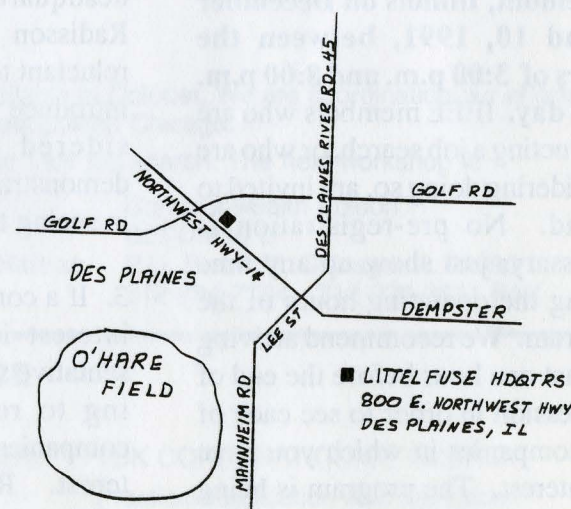


IEEE

## POWER ENGINEERING SOCIETY

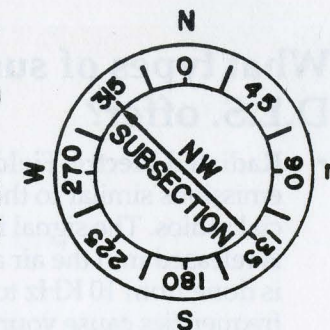
- HOST:** Mr. George Farrell  
Manager - Tech Services and Training  
Littelfuse Inc.
- EVENT:** Littelfuse Plant Tour and Test Station Demo
- PLACE:** Littelfuse Headquarters  
800 E. Northwest Hwy, Des Plaines, IL
- DATE:** November 13, 1991
- TIME:** 6:00 p.m. Sign In and Social  
6:30 p.m. Dinner/Texas Barbecue  
7:15 p.m. Tour/Demo/Training Session  
9:00 p.m. Depart

Reservations must be made by Monday 11-11-91, 12:00 p.m. by calling the IEEE Message Center at 708-963-3828. Please leave names and company name for those attending. Dinner will be \$7.00.



IEEE ELECTRON DEVICES SOCIETY

Northwest Subsection



## JOINT MEETING OF THE ELECTRON DEVICES SOCIETY AND THE NORTHWEST SUBSECTION

November 13, 1991

"A Telecommunication Systems Perspective on a Digital Interconnection Technology Based on Laser Gate Arrays"

by Dr. R.A. Nordin  
AT&T Bell Laboratories

The need for both advanced packaging and interconnection technologies in future telecommunication switching systems is of primary importance to remain competitive, while offering enhanced services. This talk will describe, from a switching system perspective, the present digital interconnection systems and requirements. The discussion begins at the chip to chip interconnection level and proceeds to the frame to frame level. An evaluation of the optimal packaging and interconnection technology that should be used in the design of future systems also will be reviewed.

R.A. Nordin received his BSEE in 1977 from Purdue University, MS and PhD in Electrical Engineering from Northwestern University in 1979 and 1984 respectively. He joined AT&T Bell Labs in 1977 where he is presently a member of the Advanced Switching Technology Group.

- Place:** The Wilton Manor  
2200 N. Main St.  
Wheaton, Illinois
- Time:** 6:00 p.m., Social, Cash Bar  
7:00 p.m., Dinner  
\$14.00 with reservations by Nov. 11  
\$15.00 without reservation  
8:00 p.m. meeting - All welcome, no charge
- Reservations:** Call IEEE office at (708)963-3828

## FOX VALLEY SUBSECTION

- EVENT:** Guided Tour of the Federal Aviation Administration Chicago Air Route Traffic Control Center (ARTCC)
- WHEN:** Tuesday, November 12, 1991  
7:30 - 8:30 p.m.
- LOCATION:** U.S. Department of Transportation  
Chicago ARTCC - FAA  
619 Indian Trail Road  
Aurora, IL

**ABOUT OUR TOUR:** See how the Chicago ARTCC safely controls air traffic in the airspace covering approximately 120,000 sq. miles. On a busy day, the ARTCC handles approx. 8,000 aircraft carrying approx. 850,000 people.

**RESERVATIONS:** Call (708) 963-3828 to make reservations by **Friday, November 8, 1991.**

**DETAILS:** This tour is limited to 22 people. Special arrangements have been made for an evening tour. Sign-up will be on a first-call, first-served basis. Before signing up, please make sure you can definitely attend. The tour will begin promptly at 7:30 p.m. Please allow sufficient time to get there.

**DIRECTIONS:** East of Aurora - take I88 west to exit Rt. 31. Go south on Rt. 31 to New Indian Trail Rd. and go west. Continue and cross the railroad track. The ARTCC facility is then on the right-hand side.

## What types of susceptibility testing does D.L.S. offer?

- **Radiated Electric Field**— a signal generator is used to create emissions similar to those from transmitters, CBs, and commercial radios. The signal is amplified and fed to an antenna where it is released into the air and picked up by your equipment. Testing is done from 10 KHz to 11.7 GHz to determine which, if any, frequencies cause your product to malfunction.
- **Conducted CW (Continuous Wave)**— test set-up is similar to that of radiated susceptibility except the energy is injected directly into the power or signal leads through a coupler. This simulates radio frequencies picked up on power and signal lines and brought into your equipment.
- **Conducted Transient**— a transient generator is used to inject various levels of voltage into the signal and power leads of your equipment. This test simulates the turning on and off of other equipment connected to the same power line as your product.
- **ESD (Electrostatic Discharge)**— ESD energy is injected into multiple points on your equipment from an ESD gun.
- **Voltage Variance (Surges and Sags)**— momentary high and low line voltages are sent to your equipment from a line voltage variation simulator, creating brown-outs and surges similar to those your equipment experiences from the power line.
- **Radiated Transient**— a transient generator is used to inject energy into external wires which have been wrapped around your equipment or bundled with your cables to simulate transients radiated from nearby equipment.
- **Radiated Magnetic**— current is injected into a loop antenna generating a magnetic field which is exposed to your equipment. The frequency is normally 50 or 60 Hz but can be varied. This test simulates high magnetic fields seen near motors, transformers, and other equipment using large amounts of power.



## Which tests apply to your product?

Test specifications are based upon specific product usage. Call D.L.S. today to discuss which specifications apply to your product, or to have us develop a specification that is unique for your particular needs. Current test specs available include:

EC 1992 requirements for Europe

MIL STD 461 A, B and C required for most military purchases

MDS 201-0004 for medical equipment (includes 25 pages of rationale showing how to modify these specs for non-medical purposes)

SAE, BELLCORE, and many others.

## Why D.L.S.?

Just ask our customers—we're proud of our enviable track record of quick turn-around time, immediate results, and cost effective solutions.

**Call D.L.S. to schedule a susceptibility test today... your company's reputation may depend on it.**

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## INDUSTRY APPLICATIONS SOCIETY INDUSTRIAL ELECTRONICS SOCIETY CHICAGO CHAPTER

**EVENT:** Effective Delegation for Project Handlers.

**FEATURED SPEAKER:** Dan Mathein

**WHEN:** Wednesday, November 13, 1991

**WHERE:** Hackney's on Lake  
1514 E. Lake Ave. Glenview, IL  
(2 miles west of the Edens,  
1/10 miles east of Waukegan Rd.)

With increasing complexity of today's projects and strict timetables for completion, it is imperative that when a deadline approaches, all of the assigned sub-tasks have been executed correctly so that they may easily be assembled in the final project.

Mr. Dan Mathein is a Training and Development Manager with Rank Video Services America in Deerfield, IL. His program is designed to assist the project handler and will cover such topics as information flow, reverse delegation, time management, preplanning, and accountability.

**PROGRAM TIMETABLE:** 5:30 - Social  
6:30 - Dinner  
7:30 - Speaker

To make reservations, call Chuck Wintegerst or John Kovacik at Underwriters Laboratories (708-272-8800), or the I.E.E.E. Office at (708)-963-3828.

## Meeting of the IEEE Communications Society (Chicago Chapter)

**DATE:** Wednesday, November 13, 1991

**GUEST SPEAKER:** Ted Lepucki, GTE Airfone

**TOPIC:** Telephones in the Sky: An Overview of Commercial Air-to-Ground Communications

**PLACE:** Sharko's Restaurant, 2225 Ogden Avenue, Lisle, IL

**TIME/COST:** Social: 6:00 PM - Cash Bar

Dinner: 7:00 PM - \$13.00

Speaker: 8:00 PM - FREE

**RESERVATIONS:** Call (708) 963-3828 to make dinner reservations by Monday, November 11, 1991.

**FURTHER INQUIRIES:** For further questions, contact Ken Smolik at (708) 713-1455.

**ABOUT THE TOPIC:** Airline passengers have had the ability of making telephone calls aboard aircraft for several years. Although most people assume that this service is an application of cellular technology, it is in fact a separate service with its own frequency allocation. This presentation will describe the unique attributes of air-to-ground communications and the implementation of the current GTE Airfone® system.

**ABOUT THE SPEAKER:** Ted Lepucki is Director of Radio Systems at GTE Airfone Incorporated. He is responsible for radio product development, FCC technical coordination, RF systems architecture and propagation. Mr. Lepucki began his career with Motorola designing various subsystems for land mobile radios. Prior to joining GTE, Mr. Lepucki was Unit Manager for Northrop Defense Systems where he was responsible for Systems Engineering of RF Test Systems.

Mr. Lepucki has both a BS and MS in Engineering from the University of Illinois, Chicago. He has been a registered Professional Engineer in Illinois since 1979.



IEEE

## LASERS AND ELECTRO-OPTICS SOCIETY



Topic: Vertical Cavity Lasers and Microresonators  
 Date: Wednesday, November 20, 1991  
 Speaker: Jack Jewell

ABSTRACT: Vertical cavity lasers (VCL) have potential applications ranging from CD readout, laser printing, 2-D scanning, fiber communications, and optical computing. Design issues include: pumping geometry, active layer thickness, optical and electrical confinement, electrical resistance, output power, threshold, wavelength, surface recombination, fabrication, output beam characteristics, and micro-optic integration. Three specific designs for widely different applications will be addressed:

- Visible wavelength, very low cost VCLs as individual components for compact disk read/write, linear arrays for laser printing, or matrix-addressable arrays for 2-D scanning and confocal microscopy.
- 1.55 $\mu$ m for high speed optical fiber communications.
- Near-IR, submicron-diameter, ultra-low threshold, for optical computing or chip-to-chip communication.

Jerry Sharko's, 2225 Ogden Avenue, Lisle, Ill

|                         |           |                                   |
|-------------------------|-----------|-----------------------------------|
| Social:                 | 6:00 p.m. | Cash Bar                          |
| Dinner:                 | 7:00 p.m. | \$14 per person, \$7 for students |
| Technical Presentation: | 8:00 p.m. | No Charge                         |

Entree choices are Chicken Primavera or Orange Roughy. Advanced dinner reservations should be made by calling the IEEE Chicago Message Center at (708) 963-3828 by 5:00 p.m. on Monday November 18, 1991. For additional information, contact Bob Novotny at (708) 713-5419.

### THE CHICAGO CHAPTER OF THE IEEE COMPUTER SOCIETY ANNOUNCES

|               |                                                                       |
|---------------|-----------------------------------------------------------------------|
| TOPIC:        | IBM PC Shareware for MSDOS                                            |
| DATE:         | Thursday November 14th, 1991                                          |
| SPEAKER:      | Gary Elfring Elfring Soft Fonts, Wasco, IL                            |
| PLACE:        | Wilton Manor Main St./Schmale Rd. at Geneva Road, Wheaton, IL         |
| TIME/COST:    | Social: 6:00 PM - Cash Bar<br>Dinner: 7:00 PM - \$12.00               |
| PRESENTATION: | 8:00 PM - Free (but make reservation to get a seat!)                  |
| RESERVATIONS: | Call (708) 963-3828 for Dinner and/or Meeting, by November 12th, 1991 |

OVERVIEW: Lots of high-quality shareware exists for the IBM PC and its clones. An average shareware program is as good as - or even better than - its commercial counterpart; furthermore, you can test shareware software before buying, just like "test driving" before buying it. This talk will highlight the world of shareware: the available types, several outstanding examples, various sources for them, and protection against viruses.

NOTE: A limited number of free copies of the new *Corporate Shareware Catalog* Book will be there if you come early. After the talk, attendees will be able to duplicate numerous programs onto **pre-formatted** 5 1/4", DS-DD diskettes. Also, if possible, please bring your PC to help speed things along, especially if it has both 5 1/4" and 3 1/2" floppy drives.

ABSTRACT: Mr. Elfring will describe sources for shareware such as user groups and Bulletin Board Systems (BBS). Next, he'll describe what's available in shareware, including system utilities, communications, business programs, word processing, and printing & fonts. The talk will conclude with a question and answer period, followed by a diskette copying session.

ABOUT OUR SPEAKER: Gary Elfring is the President of Elfring Soft Fonts, Wasco, IL, a vendor of a wide variety of "soft" fonts and control utilities for LaserJet and DeskJet printers. Gary has taught a series of nationwide seminars for McGraw Hill and Electronics magazine in assembly language programming, C programming, and microprocessor applications; he is the author of two books, "Microcomputer Assembly Language Programming" (Van Nostrand-Reinhold) and "The Soft Font Manual". He has also published many magazine articles which have appeared in *Byte*, *Computer Language*, *PC Tech Journal*, and *Programmer's Journal*.

QUESTIONS: call Joe Feitler at (708) 505-9100 x277 for directions or about bringing a PC to this event.