



The IEEE

Newsletter

PUBLICATION OF THE NORTH JERSEY SECTION OF THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS

NY/North Jersey-EMS:

Talk On Team Meeting Technique & Officer Election

On April 15, 1992 the NY/North Jersey IEEE Engineering Management Society will present a talk on "Team Meeting Technique (TMT)." The speaker will be Al Connelly, the creator of the TMT concept. An election of officers will take place after the talk.

About The Talk

TMT is for those who want more productive and creative meetings. TMT is for those who want to have a team oriented and positive work environment. It is for those who need to explode the meeting log jam. Topics covered are:

Meeting Preparation: Sell the meeting, construct the agenda, solicit the attendees, and produce effective meeting notices.

Discussion Skills: Make discussions happen, learn how to provide effective feedback, and manage the meeting process.

Dealing with Meeting Problems: Deal with discussion problems, overcome participation problems, and turn conflicts into benefits.

Follow Through Strategies: Meeting minutes and action item tracking techniques are explained and illustrated.

About The Speaker

Al Connelly is a technology management consultant. His practice includes establishing the processes, procedures, and teams that lead to successful projects and products. Successful teams need productive meetings, hence TMT.

Mr. Connelly has an AB from UC-Berkeley, a MS from the University of Idaho, and a MBA from Ohio University. He teaches project management in the NJIT Engineering Management graduate program.

All Welcome

You do not have to be an IEEE member to attend. Everyone is invited and there is no charge for attendance.

Time: 6:30 PM, Wed., April 15, 1992.

Place: ITT Auditorium, 500 Washington Ave., Nutley, N.J.

Information: Alex Richardson (201) 992-0448.

North Jersey Section PACE: Organizing A Local IEEE Consultant's Network

The April 9, 1992, meeting of the North Jersey Section's Professional Activities Committee for Engineers will present a talk on "Organizing A Local IEEE Consultant's Network." The speaker will be Warren Newman.

About The Talk

Consultant's Networks have been formed in many IEEE Sections, based on the initial experiences of the IEEE Consultant's Network of Long Island, which has been operating since 1985.

Consultant's Networks encourage and promote the use of independent engineering and technical consultants by business and industry. They provide an environment for consultants to share experiences and exchange information on business and technical issues. Networks are the ideal platform for engineers starting a consulting career to learn about the real advantages and disadvantages of being in private practice.

Mr. Newman will provide a broad overview of IEEE Consultant's Networks, and

will describe: What are Consultant's Networks/What they do; How a Network is organized and funded; What the benefits of participating are; How networking helps consultants build and maintain a practice; The types of speakers that are typical at the monthly meetings.

About The Speaker

Warren Newman is Chairman of the IEEE Consultant's Network of Long Island and President of Newman Technical Services, Inc. A full time consultant for 10 years, he holds BSEE and MSEE degrees from Polytechnic University and is licensed in New York State as a Professional Engineer. He consults in various areas of the electronics industry, specializing in instrumentation design for medical, commercial, industrial and military applications. His 20 years of experience includes 15 years in the medical electronics industry developing new products that are used to measure various cardiovascular parameters.

Time: 7:30 PM, Thursday, April 9, 1992.

Place: Jersey Central Power & Light Co., Madison Avenue and Punch Bowl Rd., Morristown, NJ.

Further Information: Robert Sinusas (201) 228-3941.

DON'T MISS IN THIS ISSUE:
Fellows Awards Banquet p3
Award Recipients p4,5
ELECTRO/92 Show..... p6
IMTC/92..... p6
Trenton Computer Festival/92 p7
NJ IEEE Technical Career Fair..... p8

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NEWSLETTER STAFF

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It is not necessary to inform the North Jersey Section when you change your mailing address. The NEWSLETTER and other section mailings use a list provided by IEEE's national headquarters in New York. This means the Section has no need to maintain a mailing list or addressing plates. Section membership records are changed when Headquarters notifies us.

SECTION OFFICERS

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471-0721
Vice-Chairman-2 Tom De Nigris
533-9325
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785-3673
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Member-at-Large Joe Nelson
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Jr. Past Chairman George Graul

The North Jersey Section Executive Committee usually meets the first Wednesday (except holidays and December) of each month at 7 PM. These meetings are open to all members. Information on meeting agenda is available from Al Connelly, Section Secretary at (201) 616-0755.

Elected Section Officers are listed above.

No.Jersey/Princeton IAS: Spacecraft Power System Design

On April 27, 1992, the Joint North Jersey-Princeton Chapter of Industrial Applications Society will host a presentation on "Spacecraft Power System Design." The speaker will be Dr. S. Rao Yadavalli.

About The Talk

There will be a brief discussion on system performance requirements and environments, and driving spacecraft power systems design. Typical power system architectures and distribution voltage selection will be discussed along with alternative power sources and their selection with those of their characteristic which drive the method of power regulation. Present options for energy storage, power conditioning and control, and some areas that require future development will be pointed out.

About The Speaker

S. Rao Yadavalli has a BS in Electrical Engineering from Andhra University, MS in High Voltage Engineering from the Indian Institute of Science, and PhD in Electrical Engineering from the University of Wisconsin, majoring in power systems. He has developed and built high voltage test equipment, developed test methods for insulation-aging and lightning arresters, worked in the areas of electrical power systems, superconductive energy storage, wind energy conversion, and space power systems and energy conversion. He has worked in Siemens Allis and Martin Marietta and has been with GE Astro Space Division as a staff engineer since 1983. He has worked on space power systems on several programs including SP-100, Space Station, Mars Observer and currently is working on the Global Geospace Science Spacecraft.

Pre-Meeting Buffet Dinner

The pre-meeting buffet dinner starts at 6:00 PM and the presentation begins at 7:00 PM.

Time: 7:00 PM, Monday, April 27, 1992.

Place: Princeton University, Engineering Quadrangle, Room C217, School of Engineering, Olden Street, NJ.

Information/Registration:

Vittal Rebbapragada (201) 804-2011;
Max C. Schramm (201) 887-1120; Dr.
S.R. Yadavalli (609) 490-3519.

Metro EMBS:

Advances And Issues In Cardiac Ultrasonography

You are invited to a Forum presented by the Engineering in Medicine and Biology Society, NY/NJ/LI Chapter IEEE, and Co-sponsored by the New York Academy of

Medicine Sections for Biomedical Engineering, and the New York IEEE Computer Society. The topic will be "Advances And Issues In Cardiac Ultrasonography" and will take place April 8, 1992. Speakers at this meeting will be Dr. Louis Teichholz and Dr. Victor Klig.

Dr. Louis Tiechholz is Professor of Medicine at Mount Sinai School of Medicine, New York City, Acting Chief of the Division of Cardiology, Mount Sinai Hospital and is an acknowledged authority on echocardiology.

Dr. Victor Klig, is Senior Research Associate, Division of Cardiology, Mount Sinai Hospital, Adjunct Faculty, Rockefeller University, New York.

Both Dr. Teichholz and Dr. Klig have been engaged in echocardiographic tissue characterization research since 1984, and are members of the Intravascular Echocardiography research group at Mt. Sinai Hospital

Time: 7:00 PM, Wednesday, April 8, 1992. Pre-lecture get-together, between 6 and 7 PM in the Cafeteria Snack Area to the left of Main Entrance to the Tower Building.

Place: Rockefeller University Tower Building, Room 305, 1200 York Ave., NYC. Free Parking Available.

Further Information: Robert Heyman (609) 465-7633; Joel Levitt (718) 891-6460; Edna Feher (212) 757-0610.

Princeton/NJ Coast NPSS: Fusion Plant Planned

On April 8, 1992 the IEEE Nuclear and Plasma Sciences Society (NPSS), Princeton/New Jersey Coast Chapter, will present a lecture "The Steady State Tokamak Physics Experiment." The speaker will be Dr. G.H. Neilson.

About The Lecture

Construction of a fusion demonstration plant around the year 2025 has been set as a goal for the international development of fusion energy. To accomplish this will require some major facilities beyond the present generation of fusion devices, which will achieve breakeven conditions in the 1990's.

About The Speaker

Dr. Neilson is a visiting scientist at the Princeton Plasma Physics Laboratory, where he was formerly Deputy Head of Project Physics for BPX. He is now a member of a national team that is defining the requirements and design concept for a steady-state tokamak facility to be proposed to the U.S. Department of Energy.

Time: 8 PM, Wednesday, April 8, 1992.

Place: David Sarnoff Research Center, Princeton, N.J.

Information/Directions: Surinder Seehra (609) 490-2972.

Congratulations New Senior Members

Robert B. Allen
John J. Buraczynski
Juin-Hwey Chen
David A. Dietsche
P.J. Dugal
Lois B. Pritchard
Thomas C. White

Get information on advancing to Senior Member grade by contacting Don Weinstein, Kulite Semiconductor, One Willow Tree Road, Leonia, NJ 07605-2239 (201) 461-0900, ext. 3106.

'92 Optoelectronics Seminar Series

The third and last session of the 1992 Optoelectronics Seminar Series will take place on Wednesday, April 8, 1992, 3-5 PM at the Alumni Center.

Papers at this session will be: "Advances in Image Sensors" by Walter F. Kosonocky, NJIT; and "Thin Film Transistor/Liquid Crystal Flat Panel Displays" by Webster E. Howard, IBM.

Location: NJIT Alumni Center, Newark, N.J.

Registration: By mail, telephone, or in-person. Those who register in advance will be sent a map. There is no registration fee. Refreshments will be served. **Information:** Dr. Gerald Whitman (201) 596-8396/3232.

WINLAB Presents Workshop

On April 28-29, 1992, Wireless Information Network Laboratory (WINLAB) in cooperation with the IEEE Vehicular Technology Society, will present the "3rd Workshop on Third Generation Wireless Information Networks."

The vision of third generation wireless communications is a compatible set of linked networks that allow people and machines in all locations to exchange all kinds of information. With wireless communications expanding faster than ever in the 1990's, delegates to the third WINLAB Workshop will think ahead to the next century. Registration is limited to maintain a workshop atmosphere.

For program information contact: Ms. Melissa Gelfman, WINLAB, POB 909, Piscataway, NJ 08855-0909.

For registration materials and information about special hotel rates at the Ramada Renaissance Hotel in East Brunswick, call: (908) 932-0283; FAX: (908) 932-3963.

Tour JCP&L Energy Control Center

The April 23, 1992 meeting of the North Jersey Section IEEE Power Engineering Society will feature a tour of the new Jersey Central Power & Light Energy Control Center (ECC), the centralized control facility for all of Jersey Central's system operations. The ECC serves as the hub, both of a new Energy Management System (EMS) and a new radio/telephone communications system for power system operations.

The new center, which became fully operational at the end of 1991, features six operating positions with full graphics consoles facing a 135 foot dynamic map-board. The mapboard depicts the Jersey

Central Power system. The Jersey Central EMS is completely redundant and based on Cyber 960-11 mainframes. The system is currently configured with approximately 260 remote terminal units.

Mr. Gary Syvertson and Mr. Robert Page will host the tour. The tour is free and is open to all interested parties.

Gary Syvertson is a Senior Member of IEEE and past Treasurer & Vice-Chairman of the Eastern Shore section in Maryland. He is Supervisor, System Operations for JCP&L.

Time: 7:00 PM, Thursday, April 23, 1992.

Place: JCP&L Co., Madison Ave. & Punch Bowl Rd., Punch Bowl Room, Morristown, N.J.

Information/Reservations: Joseph Kane, Jr. (201) 455-8456.

IEEE AWARDS BANQUET

North Jersey Section April 29, 1992 Birchwood Manor

**A time to relax, unwind and enjoy —
A time to pay tribute to our New Fellows —
A time to honor our new Senior Members —
YES it's time for the Annual Section Banquet**

The Annual Section IEEE Awards Banquet will be held this year again at the Birchwood Manor in Whippany. The affair is scheduled for Wednesday evening, 7-9PM, April 29, 1992. Tickets are \$25.00 each and includes a complete prepaid, two-hour open bar, hors d'oeuvres, buffet, and dessert. Spouses and all guests are welcome.

Reservations required by April 18, 1992. Complete the reservation form below and return it with your payment. If any additional information is required concerning the Banquet, contact Anne Giedlinski at 455-8556.

Use this form for Banquet reservations enclosing a stamped self-addressed envelope. **Reservations required by April 18, 1992.** Mail reservation request to:

Anne Giedlinski
299 Brooklake Road
Florham Park, NJ 07932

Enclosed is _____ Please forward _____ tickets at \$25.00 each (make checks payable to **North Jersey Section IEEE**) to:

Name: _____

Address: _____

Fellow Awards

Biing-Huang Juang AT&T Bell Labs

"For contributions to the theory of vector quantization and its application to coding and automatic recognition of speech"



Biing Hwang Juang is a Distinguished Member of Technical Staff in the Speech Research Department of AT&T Bell Laboratories. He was associated with Speech Communications Research Laboratory (SCRL) in 1978, and then joined Signal Technology, Inc. in 1979 working on signal and speech related topics. These included the first use of vector quantization in vocoders at various bit rates, robust pitch and voicing detection in noisy and reverberant environments, and co-channel/multi-speaker interference suppression.

Since 1982, he has been with AT&T Bell Labs where he is engaged in a wide range of research activities. He pioneered several structured vector quantization techniques for efficient encoding of spectral information, the theory of hidden Markov model and its application to speech recognition and speech enhancement, robust distortion measures for speech recognition in noisy environments, and an adaptive minimum error rate learning theory for pattern recognition.

Dr. Juang received his BSc degree from National Taiwan University, and the MS and PhD degree from University of California, Santa Barbara. His services with IEEE included associate editorship for the *IEEE Transactions on Acoustics, Speech, and Signal Processing* and for the *IEEE Transactions on Neural Networks*, member of a number of technical committees and Chair of several IEEE sponsored workshops. He is currently Chairman of the Technical Committee on Neural Networks for Signal Processing in the Signal Processing Society.

Joseph W. Lechleider Bellcore

"For contributions to the theory and practice of high-speed digital subscriber lines"



Joseph W. Lechleider is Director, Transport Technology Planning and Analysis, at Bellcore where he has worked since its formation in 1984. He is responsible for theoretical and computer analyses of new transmission technologies proposed for implementation in the telephone copper distribution plant. He is also responsible for proposing new technologies to meet the needs of the distribution plant. He played a substantial role in the formulation of the U-interface standard for ISDN Basic Access. He first proposed the dual-duplex approach to DS1 rate transmission in the loop plant as an alternative to T1 line implementation in copper cables. He proposed the Asymmetrical Digital Subscriber Line which permits one-way transmission of DS1 rate signals, such as compressed video signals, in the wire-pair loop plant. He originated the concept of Structured Channel Signaling, which resolves any communications channel into a set of parallel, uncoupled channels with uncorrelated noises. He also proposed coordinated transmission, which uses two cable pairs in a coordinated way that increases the transmission capacity over that which could be achieved by using the pairs independently.

He has organized and chaired several Globecom and ICC sessions related to Digital Subscriber Line Technology. He is a technical editor for *IEEE Communications Magazine*. He is a member of the Communications Society's Signal Processing and Communication Theory Committees.

Lechleider received the BS degree in Mechanical Engineering and the MS and PhD degrees in Electrical Engineering from The Polytechnical Institute of Brooklyn. He

is a member of the American Physical Society and of Sigma Xi. He was named one of the first two Bellcore Fellows in November 1990. He spent the 1990-91 academic year as a Visiting Professor at Rutgers University. His current research interests are communication theory and signal processing.

James McKenna Bellcore

"For contributions to the mathematical modeling of communication and computer systems with queueing networks"



James McKenna is Executive Director, Computing and Communications Research Department at Bell Communications Research. From 1960 to 1989, he was employed at AT&T Bell Laboratories in the Research Area. Initially, his research was in mathematical physics and classical applied mathematics. This included work on optical pumping of ruby lasers, electromagnetic scattering, surface acoustic waves and the modulation of optical signals. Later, he turned to research in queueing networks, and their application to the modeling of computer and communication networks.

McKenna was made a Department Head at AT&T Bell Laboratories in 1970. Currently he directs a department at Bell Communications Research doing research in stochastic modeling, communication theory, parallel processing, and protocol specification and verification.

He received his PhD in mathematics from Princeton University in 1961. His professional affiliations include the IEEE, the IEEE Computer Society, the Society for Industrial and Applied Mathematics, the AAAS, and the ACM.

1992 IEEE Frederik Philips Award

Alan G. Chynoweth
Bellcore

"For contributions to industrial research management, and fostering the relationship between research, industry, universities and government"



Alan G. Chynoweth is Vice President, Applied Research for Bellcore. In this position he is responsible for research in the areas of science and engineering that underlie advances in the technology and service capabilities of the Bell Operating Company networks. From 1953 to 1983, when he assumed his present position, he worked at Bell Laboratories in Physics Research, as head of the Crystal Electronics Department, Director of the Materials Research Laboratory, and Executive Director of the Electronic and Photonic Devices Division. Mr. Chynoweth holds BS and PhD degrees in physics from the University of London, and was a Postdoctoral Fellow of the National Research Council, Ottawa. He has been actively involved in National Academy of Sciences committee studies, NATO panel, and has served on the National Materials Advisory Board. Throughout his career, Mr. Chynoweth has been closely associated with the various technologies underlying state-of-the-art telecommunications systems, especially with optoelectronics, and he is co-editor of the book, "Optical Fiber Telecommunications."

The Alex Gruenwald Region 1 PACE Award

Presented to

The North Jersey Section IEEE

"For Outstanding Excellence in the Promotion of Engineering Professionalism"

1992 IEEE Medal of Honor

Amos E. Joel, Jr

"For fundamental contributions to and leadership in telecommunications switching systems"



Amos E. Joel, Jr. is Executive Consultant and world authority in the field of switching. In 1983 he retired as switching consultant after 43 years with Bell Telephone Laboratories. At that time he was responsible for surveys and evaluations of new telephone switching system developments in the United States and abroad.

Mr. Joel received his bachelor's and master's degrees in electrical engineering from MIT in 1940 and 1942, respectively. He holds more than 70 patents on his work, among them the longest U.S. patent ever issued.

He has authored numerous articles on switching subjects that have appeared in encyclopedias and the technical press. His books include "Electronic Switching: Central Office Systems of the World" (1976), "Electronic Switching: Digital Central Office Systems of the World" published by IEEE Press, (1982), and "History of Science and Technology in the Bell System-Switching Technology" published by Bell Telephone Laboratories, Inc. (1982), a major contributor to the "Fundamentals of Digital Switching" published by Plenum Publishing (1983 & 1990), and co-author of "Electronics, Computers and Telephone Switching" published by North Holland (1990). He recently co-authored a study "The Future of the Central Office".

Some of his recent clients include AT&T Bell Laboratories, Bell Communications Research, IBM, Contel, Pacific Telephone, 3M, etc. He has taught and lectured extensively in the United States and abroad.

Region 1 Special Award

Richard F. Tax

"For over twenty years of outstanding excellence and dedicated service in the advancement of electrical engineering professionalism and the working engineer on a Section, Council, Region and National Level"



Richard F. Tax is a graduate of Fairleigh Dickinson University with a BSEE degree and is a Senior Member of IEEE.

Mr. Tax received the IEEE Centennial Medal in 1984, the USAB Citation of Honor in 1984, the USAB Professional Achievement Award in 1988, and the Region 1 Award for Outstanding Contributions to Engineering Professionalism in 1989.

He was appointed Chairman of the Professional Activities Committee for Engineers (PACE) in 1976. Richard has served the Section as Member at Large, Vice Chairman, and member of the Education Committee. He was Chairman of the North Jersey Section from 1985 through 1986. In 1987-1988 he chaired the 20,000 member Metropolitan Sections Activities Council (METSAC).

As PACE Chairman he organized more than 50 meetings and has been the editor of the PACE NEWS column since its inception in 1976.

In 1977, he started the USAB Task Force for the BLS, Occupational Outlook Department. He directed the efforts of this operation for 6 years.

Richard is serving as the PACE Chairman of METSAC and Area B of Region 1.

Richard is the Vice President of the American Engineering Association and founder of their publication the "American Engineer." His primary concern is for the crisis in engineering unemployment and engineering underutilization in the United States.

NY Section Computer Society: Call For Papers

The 1992 Fall Seminar: Multi-Media Computing (MMC/92) is the 23rd in a series of semi-annual all-day technical seminars sponsored by the New York Chapter of the IEEE Computer Society. It will be held on **October 27, 1992**, at the United Engineering Center, 345 E. 47th St., NYC.

MMC/92 will be devoted to all aspects of theory, design and applications of multi-media systems. A partial list of topics of interest includes: conference presentation and remote interaction systems, sales presentation systems, education systems, entertainment systems, audio-visual authoring workstations.

Prospective authors are invited to submit a 250-word summary of their paper or talk to the Program Chairman for review. The summary should contain author names, addresses, affiliations, brief biography, telephone and Fax numbers. All materials are to reach the Program Chairman at the following

address by **June 16, 1992**: Mark Lukasiewicz, Lukasiewicz Innovation, Inc., 35 Carolina Dr., New City, NY 10956-3032 (914) 634-7969. Authors will be notified of acceptance of their papers by **July 7, 1992**. Participation in the program is conditional on the receipt by **October 6, 1992**, of photo-ready seminar notes which may be: an official paper that you are presenting, a related paper you have published elsewhere, or copies of slides or overheads.

Those interested in organizing and/or participating in the New York Chapter, IEEE Computer Society's seminars should contact: Andrew Weigel (212) 480-3360 FAX: (212) 480-3363, or Mark Lukasiewicz (914) 634-7969.

IMTC/92 May 12-14

The ninth IEEE Instrumentation and Measurement Technology Conference (IMTC) will be held May 12-14, 1992, at the Meadowlands Hilton Hotel. There will be three full days of technical sessions

and an exhibition featuring test and measurement instruments and services.

Speakers and attendees will explore practical applications of instrumentation and measurement. The materials and discussions in the technical sessions will be supported by products on display on the exhibition floor. IMTC/92 is planning a separate track of workshops, hands-on sessions with presentations directly tied to the exhibition. Major companies in instrumentation and measurement will be invited to conduct these workshops. The exhibits hall will be adjacent to the technical sessions and registration will be at the exhibits entrance.

Companies wishing to exhibit at this event should contact one of the following:

Milton Lichtenstein, Exhibition Chairman, 52 Sprain Valley Rd., Scarsdale, NY 10583 (914) 725-2589; Leon Seldin, Exhibition Co-Chairman, P.O. Box 26, River Edge, NJ 07661 (201) 839-4614; or Robert Myers, Conference Coordinator, 3685 Motor Ave., Ste 240, Los Angeles, CA 90034 (213) 287-1463; FAX (213) 287-1851.

ELECTRO[®]International May 12-14, 1992

ELECTRO, the Northeast's largest electronics industry event for design, test and production engineers and engineering and corporate managers, returns to Boston May 12-14, 1992 at the Hynes Convention Center, with an expanded technology focus featuring: Cutting Edge Software for the engineering environment, including One-day Windows seminar; All-day seminar on the Demeter method for object-oriented design; Keynote address by Jim P. Manzi, CEO and President of Lotus Development Corporation.

Plus: All-new state-of-the-art Semiconductor exhibit area on the show floor; Special test and measurement section featuring up-to-the-minute developments in test and measurement equipment; Purchasing Conference on "Team-building: The Ultimate Vendor"; All-Industry Conference on how the Northeast can grow in the world marketplace.

Mail or FAX the coupon below. You'll receive: FREE admission to exhibits and technical sessions; Full preview of Electro/92 technical program.

For more information about attending ELECTRO/92
call (800)-877-2668 or FAX to (310) 641-5117.

FORM MUST BE COMPLETE TO BE PROCESSED.
Please check ALL applicable selections

<input type="checkbox"/>	G1 Engineer
<input type="checkbox"/>	G2 Project Manager
<input type="checkbox"/>	G3 Senior Management
<input type="checkbox"/>	G4 Design
<input type="checkbox"/>	G5 Test
<input type="checkbox"/>	G6 Mechanical Packaging
<input type="checkbox"/>	G7 Research & Development
<input type="checkbox"/>	G8 Manufacturing/Production
<input type="checkbox"/>	G9 Quality Control & Assurance
<input type="checkbox"/>	G0 Software
<input type="checkbox"/>	G1 Purchasing/Procurement
<input type="checkbox"/>	G2 MIS
<input type="checkbox"/>	G3 Engineering Technical Support
<input type="checkbox"/>	G4 Consultant/Educator
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<input type="checkbox"/>	G6 Sales/Marketing
<input type="checkbox"/>	G7 Rep/Distributor
<input type="checkbox"/>	G8 Other

BUSINESS CLASSIFICATION

<input type="checkbox"/>	HA Advanced Entertainment Electronics
<input type="checkbox"/>	HB Aerospace/Aircraft
<input type="checkbox"/>	HC Computers/Peripherals/Data Processing
<input type="checkbox"/>	HD Consumer Electronics
<input type="checkbox"/>	HE Contract Engineering/Manufacturing
<input type="checkbox"/>	HF Education
<input type="checkbox"/>	HO Electronic Components
<input type="checkbox"/>	HI Instruments & Controls
<input type="checkbox"/>	HJ Medical Electronics
<input type="checkbox"/>	HK Military/Government
<input type="checkbox"/>	HL Office or Business Machines
<input type="checkbox"/>	HM Research & Development
<input type="checkbox"/>	HN Tele-Data-Communications
<input type="checkbox"/>	HO Transportation
<input type="checkbox"/>	HO Unknown
<input type="checkbox"/>	HP Other

PRODUCT INTEREST

<input type="checkbox"/>	IA Semiconductors, ICs
<input type="checkbox"/>	IB Passive Components
<input type="checkbox"/>	IC Electro-mechanical Components
<input type="checkbox"/>	ID Mechanical/Packaging Components
<input type="checkbox"/>	IE Fiberoptic & Opto-electronic Devices
<input type="checkbox"/>	IF Microwave/RF comp., Instruments
<input type="checkbox"/>	IG Test, Measurement, equip., Instruments
<input type="checkbox"/>	IH Automatic Test Equipment
<input type="checkbox"/>	IJ Engineering Workstations/Peripherals
<input type="checkbox"/>	IK EDA Tools (CAE/CAD/CAT)
<input type="checkbox"/>	IL CASE Tools
<input type="checkbox"/>	IM Local Area Networks
<input type="checkbox"/>	IN Computer Subsystems
<input type="checkbox"/>	IO Power Supplies, Including Batteries
<input type="checkbox"/>	IP Production Equipment/Machinery
<input type="checkbox"/>	IQ Production Supplies/Materials
<input type="checkbox"/>	IR Contract Design/Contract Manufacturing
<input type="checkbox"/>	IS Other



Electronic Show and Convention
May 12-14, 1992
Hynes Convention Center
Boston, Massachusetts

Complimentary Registration

Member of:
zx ☐ IEEE
zy ☐ ERA
zz ☐ First Time
Attendee

7-90166

Please PRINT as you want shown on badge

NAME (FIRST OR INITIALS)										LAST									
POSITION										AREA CODE NUMBER									
COMPANY																			
MAILING ADDRESS										DEPT. OR MS.									
CITY										STATE ZIP CODE									

Three Ways to Register

1. **MAIL** - before April 15 to Electro Registration, 2368 Eastman Ave., Suite 11, Ventura, CA 93003-6476. Your badge will be mailed to you.

2. **FAX** - after April 15 FAX to (310) 641-5117. Pick up your badge at the Will Call Desk.

3. **ON-SITE** - bring this card with you to receive **FREE** admission.

Persons under 18 years of age not admitted.

Time	Databases & Networks	Word Processing & Spreadsheets	General	General	General	Introductory Sessions	Amateur Radio	CP/M Conferences	Applications Graphics	Advanced Graphics	Economic Opportunity	Desktop Publishing
10:00	Paradox - An Overview	Intro to Lotus 123 Macro Programming	E. E. Public Domain Software	Packet Drivers for PC Networking	Genealogical Computing	Introduction to MS-DOS	What is Amateur Radio?	CP/M Conference	Corel Draw	AutoCAD for Windows	Current Econ. Opportunities for Technical Professionals in US	Professional Desktop Typesetting on PCs
11:15	Advanced dBase-IIIe Programming	WordPerfect for Windows	Computers & Amateur Astronomy	ELM Update: What's New with Version 2.4	Networking with LANMan 2.1	Introduction to Word Processing	What is Amateur Radio?	Introduction to CP/M & Z System	Micrograph Charisma & Designer	Computer Graphics Theater	(Conference Lunch Break)	Desktop Publishing Fundamentals
12:30	Q & A 4.0	Quattro Pro 4.0	Security in Electronic & Computerized Voting	Computer Maintenance Options for Small Business	How to Transfer Your Skills in Today's Job Market	Introduction to Spreadsheets	No-Code Amateur Radio License Exam Session	TSMAS/TEB/TSERVER Z System Comm. Utilities	Micrograph Windows Draw! & Picture Publisher	Digital Video Interactive	Panel on Technical Development Aid to Republics of Former Soviet Union	Desktop Publishing Fundamentals (Repeat)
1:45	Superbase 4	Word for Windows 2.0	How to Obtain Freely Distributable Software	Low Cost, Real World PC Interfacing	Do it Yourself Patent Searches	How to Buy a Computer	No-Code Amateur Radio License Exam Session	ZEX - The Z System Batch Program	Aldus Persuasion	Latest Computer Games	Panel on Technical Development Aid to Republics of Former Soviet Union	Computer Law for Programmers & Desktop Publishers
3:00	Keynote Address - Main Auditorium - J. Paul Grayson, CEO, Micrografx											
3:45	Introduction to Local Area Networks	Lotus 123, Ami Pro & Freelance for Windows	How to Make Money with Your Computer	Micro System Strategies for the 90's	Unix System V.4	Introduction to Databases	What is Amateur Radio?	Banked/Portable BIOS - ZS-DOS Update	Harvard Graphics 3.0	Computer Animation	How to Become a Novell Certified Network Engineer (Latest Changes)	Publishing a Newsletter with Express Publisher
5:00	Low Cost Networking with Lantastic Z	Excel 4.0	Augmentative & Alternative Communication with Computers	Control the World with Your Computer	Computer Viruses	Use of Computers in Churches		CP/M Conference	Harvard Graphics for Windows	Computer Art & Graphics	Building a Successful Consulting Business	Aldus PageMaker

Trenton Computer Festival/92

On April 11-12 the Engineering Management Society of the North Jersey and Princeton Sections of the IEEE along with United Societies of Engineering and Science of New Jersey (of which the North Jersey Section is affiliated) will present several sessions at the Trenton Computer Festival (TCF-92). This year TCF-92 will be held at Mercer County College.

TCF-92 is the oldest and one of the largest shows devoted exclusively to personal computing attended by over 15,000 computer enthusiasts from the U.S. and foreign countries. The indoor area will have over 100 professional booths and the outdoor area features over 700 vendor spaces.

The technical program has grown to 16 parallel sessions running on Saturday 10:00-5:45 followed by a banquet and on Sunday from 10:00 to 3:00. Due to limited space only twelve Saturday sessions are shown (left).

The sessions organized by the North Jersey Section and USES-NJ are:

1. "Current Economic Opportunities for Technical Professionals." Speaker: Robert Rivers, Member of the IEEE Manpower Committee.

2. "Panel on Technical Aid to the post-Soviet Republics." Co-Hosts: Robert Todd, Program Chairman TCF and David Perry, Past President and Executive Director of USES-NJ. Panelists: Dr. Paul Goble, Carnegie Endowment for Peace; A. Philip Ferzan, Director of New Jersey's Div. of International Trade; Mary Ann Buga, Export Specialist, New Jersey Div. of International Trade; high-level representatives of one or more Republics; experienced consultants with overseas experience.

3. "Do-It-Yourself Patent Search." Speaker: Connie Wu, Engineering Resources Librarian at Rutgers College of Science and Medicine and Associate Representative for the Patent Depository Program and Former Patent Examiner.

4. "How to Transfer Your Skills in Today's Job Market." Speaker: Donald Hsu, Professor of Business Administration at Dominican College, Nyack, NY.

5. "Panel on Finding Employment." Co-Hosts: David Perry and Robert Todd. Panelists: Employment specialists with the NJ State Dept. of Labor, Division of Employment. This panel will describe some of the on-line helps provided by the Division of Employment and describe what the Division is doing to deal with the present job crisis.

Mercer County College is located at the corner of Old Trenton Road, (Rt. 535)) and Hughes Drive, in West Windsor, N.J.

For further information call David Perry (201) 325-3769; FAX (201) 325-8415.

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