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Official Publication of the Chicago Section • Institute of Electrical & Electronics Engineers • JANUARY 1991



TIME SENSITIVE MATERIAL

CALENDAR OF EVENTS

For reservations please call IEEE Office at (708) 963-3828 before the stated deadline
Copy Deadline for February SCANFAX is December 20, 1990

Jan 7 Monday	Power Engineering	Application of Programmable Controllers in Supervisory Control	Gino's Steakhouse E. 163rd & Wallace Harvey, IL	Cash Bar: 6:00 PM Dinner: 7:00 PM Talk: follows dinner
Jan 8 Tuesday	Chicago Section	Executive Committee	Contemporary Controls 2500 Wisconsin Downers Grove, IL	Meeting: 7:15 PM
Jan 9 Wednesday	Power Engineering	Distribution Automation	Carson Pirie Scott Monroe & Wabash Chicago (Corporate Level)	Social: 11:30 AM Lunch: 12:00 noon Meeting: 12:30 PM
Jan 10 Thursday	Computers	The AT&T System 7000	Interactive Systems 1901 N. Naper Blvd. Naperville, IL	Meeting: 8:00 PM
Jan 13 Sunday	Chicago Section & The Lendman Group	IEEE Job Search Training Programs (for IEEE Members only)	Embassy Suites 707 E Butterfield Rd Lombard, IL	Call for Reservation (800-562-2820)
Jan 14 Monday	Chicago Section & The Lendman Group	IEEE Engineering Job Fair	Embassy Suites 707 E Butterfield Rd Lombard, IL	For information call 800-562-2820
Jan 15 Tuesday	Chicago Section & The Lendman Group	IEEE Engineering Job Fair	Embassy Suites 707 E Butterfield Rd Lombard, IL	For information call 800-562-2820
Jan 16 Wednesday	Communications	Synchronous Optical Networks (SONET)	Sharko's Restaurant 2225 Ogden Ave. Lisle, IL	Social: 6:00 PM Dinner: 7:00 PM Meeting: 8:00 PM
Jan 17 Thursday	LEOS	Free-Space Digital Optics	Jerry Sharko's 2225 Ogden Ave. Lisle, IL	Social: 5:30 PM Dinner: 6:15 PM Meeting: 7:30 PM
Jan 22 Tuesday	Fox Valley Subsection	ISDN Applications: Today's Users	Wilton Manor Schmale Road Wheaton, IL	Social: 6:00 PM Dinner: 7:00 PM Meeting: 8:00 PM
Feb 6 Wednesday	Electro-Magnetic Compatibility	Surface Mount Filters for EMI/RFI Applications	AT&T Bell Labs 2000 N Naperville Rd Naperville, IL	Social: 7:15 PM Meeting: 7:30 PM

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ISSUE	COPY DUE	MAILED ON
FEB	DEC 20	JAN 15
MAR	JAN 29	FEB 15
APR	FEB 26	MAR 15
MAY	MAR 26	APR 15
JUNE	APR 30	MAY 15

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

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Unless otherwise specified, Chicago Section IEEE neither endorses nor sanctions any positions or actions espoused in SCANFAX.

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Send change of address to Roseann Schulz, Member Services, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854-4150. Include your SCANFAX mailing label if possible or phone direct to: 1-800-678-4333. We cannot forward this information for you, so please do not send it to the local office.



THE
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IEEE CHICAGO SECTION CORRESPONDENCE

Job Search Assistance Program for IEEE Members Set for January

Few things in life are more emotionally devastating than losing a job, especially when the opportunities in your field are suddenly reduced due to layoffs, cutbacks, or a sluggish economy.

Engineers who find themselves in this situation need help in two important areas. Outplacement assistance from a former employer can help an individual get back on the road to productivity quickly. Good outplacement programs demonstrate to individuals their value to industry and permit a positive, confident approach to their job search. The development of the right resume and cover letter, and interview training, are among the assets that can make the difference in a competitive job market.

But even for those engineers who are fortunate enough to be offered quality outplacement training, more is needed in order to find the right career in the shortest possible time. Out-of-work engineers need help making contact with hiring companies, and ideally this assistance should complement outplacement/job search training.

Until now no single program offered job search training in combination with assistance in meeting directly with hiring companies. The Chicago IEEE plans to change that on January 13, 14, and 15, 1991, by introducing a first-of-its kind program which will provide both of these essential services at one time and in one place.

On January 14th and 15th, an Engineering Job Fair will be held at the Embassy Suites Hotel - Lombard/Oak Brook, 707 East Butterfield Road, Lombard, Illinois. Employers with immediate jobs to fill will occupy suites at the hotel and will be on hand all day to discuss job opportunities with IEEE members.

On January 13th, group job search training programs will be conducted at the same location. These programs are open to all IEEE members on a first-come, first-served basis. To attend, pre-register by calling Janet Martin at (800) 562-2820. Space is limited.

Pre-registration is not required to attend the January 14 and 15 job fair.

Both the job fair and the training program are offered to IEEE members at no cost. Large pre-registration for the job search training will encourage more companies to take part in the job fair.

Look for advertisements in the employment section of THE CHICAGO TRIBUNE on Sunday, January 13th, which contain a list of companies participating in the job fair. The program is being produced for IEEE members by The Lendman Group, the nation's oldest and largest career fair producer, and by Payne-Lendman, the outplacement division of The Lendman Group.

Employers needing more information about the program should call 1-(800) 562-2820 and ask for Eloise Wood.

LETTER TO OUR CHICAGO SECTION MEMBERS

Your Program committee is working to provide the best events and presentations for the Chicago Metropolitan Area.

We are bridging program announcements into the next month. Based upon suggestions, we are providing reservation methods for meeting-only attendees. Coffee may be an option at a nominal fee. We are able to provide consultation in working with restaurants on package plans for one meeting-a-month or two meetings-a-month. Would a 7:30pm evening meeting start time be more convenient? Would you prefer meetings at company facilities with catered meals?

Confer with Society and Sub-Section officers about needs/suggestions.

We are compiling a Program Year Status and welcome your input. See last month's SCANFAX for our mailing address in Harvey.

Bob Camillone

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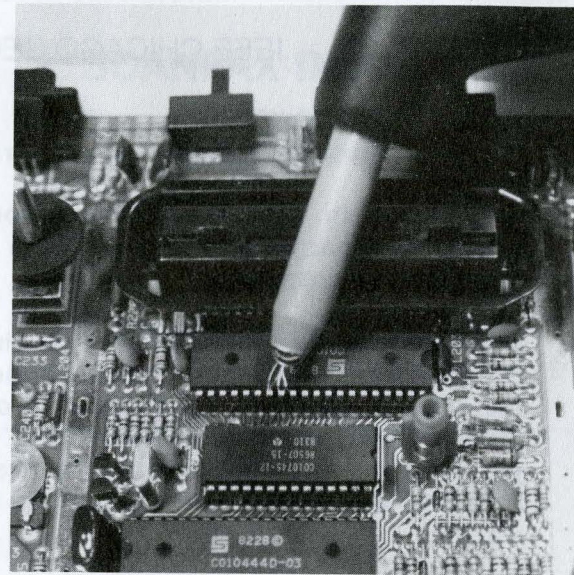
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THE CHICAGO CHAPTER OF THE IEEE COMPUTER SOCIETY INVITES YOU AND YOUR FRIENDS

DATE & TIME: January 10, 1990 (Thursday) at 8:00 PM

PLACE: Interactive Systems Corporation, 1901 N. Naper Blvd,
Naperville, IL [immediately north of Naperville Road Exit on
East-West Tollway (I-88) at southwest corner at Warrenville
Road]

SPEAKER: Edward Coleman, Product Manager – High-Performance Systems
AT&T Computer Systems, Naperville, IL

TOPIC: The AT&T SYSTEM 7000

In April 1990, AT&T announced the System 7000, a super-minicomputer. This was AT&T's first product offering to combine the advantages of a UNIX®-based operating system with RISC-based symmetrical multi-processing. The unique architecture and functionality of this product have allowed it to become a success in the commercial marketplace.

The presentation will focus on the customer needs that have led to the System 7000, on the specific performance and functionality which this product delivers, and on its system architecture. After explaining some recent enhancements, a discussion of the product's design characteristics will follow, with the aid of AT&T Bell Labs personnel involved with the System 7000.

About our Speaker:

Mr. Coleman holds a Bachelor of Science Degree in Mechanical Engineering from Purdue University and a Masters Degree in Business Administration from DePaul University.

As the System 7000 Product Manager, he is responsible for planning and coordinating for its product evolution, including new features, pricing strategies, and product positioning. During Ed's 11 years at AT&T, his past assignments have included product management for AT&T 3B Computers, project management, and sales support.

Please phone your reservations to our IEEE Office (708) 963-3828. For additional information/directions please call Joe Feitler at (708) 505-9100, x277.

IEEE MEETING NOTICE

CHICAGO CHAPTER - IEEE EMC SOCIETY

DATE: WEDNESDAY - FEBRUARY 6, 1991 7:30 P.M.

LOCATION: AT&T BELL LABORATORIES
2000 N. NAPERVILLE ROAD
NAPERVILLE, ILLINOIS

SPEAKER: ROBIN WILSON - MURATA ERIE NORTH AMERICA

TOPIC: SURFACE MOUNT FILTERS FOR EMI/RFI APPLICATIONS

FOR RESERVATIONS CALL IEEE OFFICE 708-963-3828

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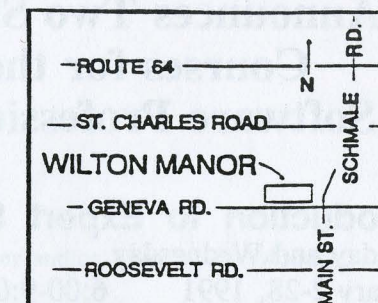
TOPIC: Integrated Services Digital Network (ISDN) Applications: Where Users Stand Today

SPEAKER: James E. Bielanski

DATE: Tuesday, January 22nd, 1991

PLACE: Wilton Manor, Schmale Rd., Wheaton

TIME/COST: Social: 6:00 p.m. - Cash Bar
Dinner: 7:00 p.m. - \$12.00
Speaker: 8:00 p.m. - Free



RESERVATIONS: Call (708) 963-3828 to make reservations for Dinner and/or Meeting, by Friday, January 18th 1991.

TECHNICAL QUESTIONS: Direct questions about our topic or speaker to Dan Esposito at (708) 979-8032.

ABSTRACT: Users were first introduced to ISDN in 1986. Since then, ISDN has evolved from a functionally rich voice service to a viable data transport network. ISDN has expanded the "Work at Home" concept, as well as closed the visual void in conference calls by providing an inexpensive video teleconferencing service. This presentation will describe actual applications used by customers today.

ABOUT OUR SPEAKER: Mr. Bielanski is Manager of Applications Development at Illinois Bell Telephone. He has a B.S.E.E. and M.S. in Computer Science from Illinois Institute of Technology. A registered professional engineer, Mr. Bielanski is an IEEE member and belongs to both the Western Society of Engineers and the National Society of Professional Engineers.

Note: While the meeting is free, recognize that the room is subsidized by the cost of the dinners. Your attendance at the dinner helps to support our continued offering of interesting meetings.

IEEE CHICAGO SECTION STATS FROM PISCATAWAY DATA BASE AS OF SEP 90

GRADE	CHI	FV	NW	TOTAL
LIFE FELLOW	23	7	4	34
LIFE SENIOR	84	57	70	211
LIFE MEMBER	84	54	74	212
LIFE ASSOC	9	6	7	22
FELLOW	19	9	6	34
SENIOR	81	82	91	254
MEMBER	1205	1432	1466	4103
ASSOCIATE	460	388	320	1168
AFFILIATE	280	233	170	683
STUDENT	452	185	207	844
TOTAL	2697	2453	2415	7565
SOCIETY	1833	1741	1652	5226

MEMBER SERVICES NOTES: Jack Sherman
- The Chicago Section Stats chart shows members by grades of CHI - Chicago, FV - Fox Valley, and NW - Northwest.

A Life member has a minimum of 35 years. Surely our 22 LA's and 212 LM's have earned an upgrade.

Affiliate Members, AF, are members of other professional organizations who apply to a Technical Society.

SOCIETY refers to membership in Technical Societies.

Elsewhere in this issue is a chart showing Society members by grade. The societies marked with an asterisk do not have a Chicago chapter. To help form one, leave me a message at the Business Office: 708 963 3828.

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Meeting of the IEEE Communications Society (Chicago Chapter)

DATE: Wednesday, January 16, 1991

GUEST SPEAKER: Howard J. Altman

- Tellabs Inc., Lisle, IL.

TOPIC: Synchronous Optical Network (SONET)

PLACE: Sharko's Restaurant, 2225 Ogden Ave., Lisle

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 reservation for Dinner and/or Meeting by Monday, January 14, 1991.

FURTHER INQUIRIES: For further questions call Patrick Riley at (708) 512-7037.

ABOUT THE TOPIC: The Synchronous Optical Network (SONET) concept was developed in 1984 and has since been an area of activity in standards, network planning, and product development. This talk will provide a general introduction to SONET followed by network applications, new SONET technology, standard's status, product status, and areas of future SONET activity.

ABOUT OUR SPEAKER: Howard J. Altman has extensive industrial experience in fiber optic telecommunications. He presently is a systems design development manager at Tellabs Inc. specializing in systems design technologies and methodologies as applied to digital cross-connect systems and SONET.

Mr. Altman received a B.S. degree from the University of Cincinnati in 1980 and a M.S. degree from Stanford University in 1981, both in electrical engineering. From 1985 to 1988, Mr. Altman was cochair of the T1X1.3 Jitter and Wander Sub-Working Group. In 1988, he was elected to a two year term as cochair of the T1X1.6 Tributary Analysis Working Group. He is a member of Tau Beta Pi and Eta Kappa Nu.



IEEE



LASERS AND ELECTRO-OPTICS SOCIETY

COMPONENTS, HYBRIDS, AND MANUFACTURING TECHNOLOGY SOCIETY CALL FOR PAPERS- CONFERENCE ON ISSUES AND OPPORTUNITIES IN MICROELECTRONICS

DATE: ALL DAY THURS APRIL 11, 1991 15 - 20 minute segments.
PLACE: GALVIN CENTER, MOTOROLA INC CAMPUS, SCHAUMBURG
TOPICS: PACKAGING SENSORS MULTI-CHIP MODULES OPTICAL DEVICES
MATERIALS CLEANING RELIABILITY RISKS DESIGN OF EXPERIMENTS

STUDENT AND FRESHOUT SUBMISSIONS ARE WELCOME!

Send abstract to: Jack Sherman 1395 Highland Blvd Hoffman Estates, IL 60195
PHONE 708 576 8222 or FAX to 708 576 8221.

- with Northern Illinois University and ISHM - Int'l Society for Hybrid Microelectronics.

JANUARY MEETING THIS IS THE FIRST OF A SERIES OF JOINT MEETINGS WITH CHMT and
SMTA - SURFACE MOUNT TECHNOLOGY ASSOCIATION
ISHM - INTL SOCIETY FOR HYBRID MICROELECTRONICS

DATE: TUES JAN 15 1991
PLACE: Hermitage Restaurant 800 W Devon - at Elmhurst Rd. Elk Grove - Bensenville
TIME: DINNER AT 6PM RESERVATIONS NEEDED Members \$15 Non-members \$20
SPEAKER: JUSTIN BOLGER - AMICON - EMERSON & CUMING - GRACE
SPEAKER AT 7PM RESERVATIONS NEEDED - NO CHARGE
TOPIC: CONDUCTIVE SURFACE MOUNT ADHESIVES TO REPLACE SOLDER,
THERMALLY CONDUCTIVE ADHESIVES FOR POWER DEVICES
GLOB TOP TECHNOLOGY MATERIALS

FOR RESERVATIONS CALL: Chicago Section IEEE 708 963 3828
FOR FURTHER INFO CALL: Kelly Noco 312 586 0666
Jack Sherman 708 576 8222

CHICAGO CHAPTER
TOPIC: Free-Space Digital Optics in Photonic Switching Systems
DATE: Thursday, January 17, 1991
SPEAKER: Dr. H. Scott Hinton, AT & T Bell Laboratories
LOCATION: Jerry Sharko's, 2225 Ogden Ave., Lisle, Illinois

The optical hardware required for photonic switching systems based on free-space digital optics will be reviewed. The discussion will cover crossover interconnects, beam combination, spot array generation, optical logic using S-SEED arrays, and the integration of these components into a single module. Also, multistage networks based on this new technology will be discussed.

AGENDA: 5:30 p.m. Social/Business Meeting (Cash Bar)
6:15 p.m. Dinner (\$15 per person, \$7 for students)
7:30 p.m. Technical Presentation (No charge)

REGISTRATION: Entree choices are Chicken, Fish, or Vegetable Platter. Advanced dinner reservations should be made by calling the IEEE Chicago Message Center at (708) 963-3828 by 5:00 p.m. on Tuesday, January 15, 1991. For additional information, contact Jan P. Hessler at (708) 972-3717.

SEVENTH ANNUAL

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SOCIETY MEMBER GRADE STATS

CHICAGO

FOX VALLEY

NORTHWEST

NUM	ABBR	SOCIETY	AF	A	S	M	SM	F	AF	A	S	M	SM	F	AF	A	S	M	SM	F
01	SP	SIG PROC	0	5	20	73	5	3	0	8	0	42	1	1	0	9	6	79	5	1
02	BT	*BC TECHNOL	0	3	2	19	2	2	0	3	1	6	1	2	0	4	0	14	1	0
03	AP	ANTENNAS	0	5	10	30	8	5	0	2	3	22	1	0	0	3	2	26	6	0
04	CAS	*CKTS & SYS	0	5	18	51	4	5	0	7	1	30	2	0	0	9	1	79	2	0
05	NPS	NUCL & PLASMA	2	1	7	15	6	1	0	3	0	14	3	0	0	0	0	11	1	0
06	VT	VEH TECHNOL	0	2	2	25	4	1	0	4	2	20	1	1	0	4	1	56	6	1
07	R	RELIABILITY	0	0	1	15	1	0	0	5	0	24	2	0	0	2	0	35	5	0
08	CE	CONSUMER ELEX	0	4	3	58	8	4	0	10	1	27	5	2	0	5	1	83	14	2
09	IM	*INSTR & MEAS	0	5	2	18	6	0	0	7	2	15	0	0	0	3	0	33	4	0
10	AES	AEROSP & ELEX	0	3	7	19	4	1	0	7	4	8	0	0	0	2	4	28	1	0
12	IT	INFO THEORY	0	0	11	17	4	3	0	2	1	13	0	0	0	2	3	24	2	0
13	IE	INDL ELEX	0	1	2	44	9	1	0	5	0	37	4	0	0	3	3	64	8	0
14	EM	ENG'G MGMT	2	3	4	48	9	1	2	6	2	55	5	0	0	10	2	88	5	0
15	ED	ELECTRON DEVICES	0	2	7	18	1	1	0	4	0	11	4	1	0	3	2	30	3	1
16	C	COMPUTER	260	56	100	490	23	5	222	56	26	486	18	7	166	50	25	408	10	2
17	MTT	MICROWAVE THY	0	3	10	35	10	3	0	3	1	21	4	0	0	3	3	43	5	0
18	EMB	ENG'G MED & BIOL	1	3	18	48	8	4	0	2	2	24	1	0	0	4	6	54	3	1
19	COM	COMMUNICATIONS	3	15	32	150	16	2	5	29	9	234	21	7	0	14	6	197	11	3
20	UFFC	*USONICS; FERRO	0	1	2	9	1	0	0	1	1	16	2	0	0	2	0	14	4	1
21	CHMT	COMP HYB MFG TEC	0	4	2	23	3	0	1	4	1	27	2	0	1	5	0	40	5	0
22	OE	OCEANIC	0	1	1	3	0	1	0	1	0	2	2	0	0	0	1	2	1	0
23	CS	*CONTROL SYS	0	2	11	39	2	4	0	8	5	34	0	1	0	3	4	44	1	0
24	RA	*ROBOTICS & AUTOM	0	3	11	23	4	2	1	5	5	21	1	0	0	6	3	38	3	1
25	E	*EDUCATION	0	0	1	12	3	3	0	1	0	5	1	0	0	1	0	7	1	0
26	PC	PROF COMMUNICAT	1	1	0	14	1	0	2	2	0	9	1	0	0	2	0	14	4	0
27	EMC	EMAGNETIC COMP	0	2	2	15	4	2	0	1	0	22	1	0	0	3	0	22	9	1
28	SMC	SYS MAN CYBERNET	0	2	11	11	3	1	1	1	2	11	2	0	0	3	0	13	0	0
29	GRS	GEOSCIENCE	0	1	1	2	0	1	0	1	0	2	1	0	0	0	0	6	1	1
30	SIT	*SOC IMPL OF TECH	0	2	3	18	3	1	0	2	1	12	3	0	0	1	0	14	4	0
31	PE	POWER ENGG	0	10	7	14	32	8	0	7	0	133	28	1	0	8	2	11	39	3
32	DEI	*DIEL & INSUL	0	0	0	13	2	1	1	1	0	7	1	0	0	4	0	12	4	0
33	MAG	MAGNETICS	0	1	1	9	2	1	0	2	1	9	3	0	1	0	0	16	2	0
34	IA	INDUSTRIAL APPL	0	4	0	80	18	2	2	8	0	60	13	0	0	2	0	96	17	0
35	PEL	POWER ELEX	0	1	8	25	1	1	0	1	1	22	0	0	0	1	0	40	4	0
36	LEO	LASER & EL OPTICS	2	1	19	20	0	2	1	7	1	35	4	0	0	4	4	26	0	1

CHI	FV	NW	TOT
106	52	104	262
28	13	23	64
56	27	37	120
83	40	91	214
32	22	12	66
34	28	68	130
17	31	42	90
77	45	105	227
31	24	40	95
34	19	35	88
35	16	31	82
57	46	78	181
67	70	105	242
29	20	39	88
834	815	663	2312
61	29	54	144
82	29	69	180
218	300	231	749
13	20	21	54
32	35	51	118
6	5	4	15
59	47	52	158
43	33	51	127
19	29	10	58
17	14	20	51
25	24	35	84
28	17	16	51
5	4	8	17
27	18	19	64
205	169	171	545
17	10	20	47
14	15	19	48
104	83	115	302
37	24	45	106
44	48	35	127



IEEE

POWER ENGINEERING SOCIETY

SPEAKER: Ms. Marjorie Frett, Sales Executive, Square D Company

TOPIC: Application of Programmable Controllers in Supervisory Control

ABSTRACT: The presentation will examine the benefits of supervisory control systems which integrate RTU functionality into programmable controller based control systems. The major benefits of this type of supervisory control system include a reduction in operating cost due to an increase in the efficiency of operating personnel, and a decrease in production downtime. Two applications will be highlighted: 1) the use of a supervisory control system in a utility company's switchyard; and 2) supervisory control in a fossil fuel generating station.

BACKGROUND: Ms. Frett received her BSME from Gonzaga University. She has 10 years of experience in distribution, control and automation equipment.

PLACE: Gino's Steakhouse, E. 163rd and Wallace, Harvey, Illinois.
Joint meeting with Calumet Section.

DATE: January 7, 1991

TIME: 6:00 p.m. Cash Bar, 7:00 Dinner, Presentation follows dinner.
Reservations must be made by January 2, 1991, by calling 708-963-3828. Please leave name(s) and company name. Cost is based on your menu selection.



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POWER ENGINEERING SOCIETY

SPEAKER: Mr. David W. Brown, Marketing Representative, ABB Power T&D Company Inc.

TOPIC: Distribution Automation - Alternatives for Electric Utilities
During the 1980's, utilities experimented with communication and control technologies and experienced the anguish of defining practical distribution automation monitoring and control philosophies. The 1990's will likely be the period where many utilities apply these experiences and install operational distribution automation systems. A wide range of communication technologies will be employed; one and two-way radio, power line carrier, telecommunications and others will all be integrated to operate as a single system.

BACKGROUND: Mr. Brown received his engineering degree from Oregon State University. He has ten years of experience in the application of distributed and centralized control systems to automate power plant and electrical distribution systems.

PLACE: Carson Pirie Scott - Chicago (Monroe and Wabash) - Corporate (lower) Level

DATE: January 9, 1991

TIME: 11:30 Social 12:00 Lunch 12:30 Presentation
Reservations must be made by noon Monday, January 7, 1991, by calling 708-963-3828. Please leave name(s) and company name. Lunch is \$9.00.