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C A L E N D A R O F E V E N T S

For reservations call the IEEE office at 236-4609
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COPY DEADLINE: NO LATER THAN THE 25th of the MONTH

JUNE 6-8	International Conf. on Consumer Electronics	IEEE, BCCE & others	Westin Hotel O'Hare 6100 River Rd. Rosemont	(For inf., Larry Dietch, 391-7882)
11	"Low Sidelobe Phased Array Antennas"	Antennas & Prop./ Microwave Theory & Techniques Soc.	Louis' Restaurant 351 E. Lake St. Addison	Social 5:30 PM Dinner 6:30 PM Meeting 7:30 PM
12	Monthly Meeting - ALL WELCOME	IEEE Executive Cte.	McDonald's Plaza NE corner McDonald Dr. at 22nd, Oak Brook	Meeting 7:30 PM
JULY 10	Monthly Meeting - ALL WELCOME	IEEE Executive Cte.	McDonald's Plaza NE corner McDonald Dr. at 22nd, Oak Brook	Meeting 7:30 PM
AUG. 14	Monthly Meeting - ALL WELCOME	IEEE Executive Cte.	McDonald's Plaza NE corner McDonald Dr. at 22nd, Oak Brook	Meeting 7:30 PM

CHAIRMAN COMMENTS - As we reach the end of our season for the Section, I would like to reflect on some of the highlights over the past year. Once again we have had numerous successful meetings conducted by the technical chapters and subsections. As you know, these activities are a primary reason for the existence of local IEEE sections. Thanks to those of you who have participated at these meetings, and for those who have not, please note the agenda on the cover of each month's Scanfax for topics that pertain to your area of interest. One of IEEE's major strengths is its diversity across the many divisions of electrical and electronic engineering. Our chapter and subsection meetings give you the opportunity to keep in touch with developments in areas that do not deal with your day to day professional interest.

This past year, our newest chapter, Professional Communications/Engineering Management was organized. It covers areas that many engineers become involved in - management and supervision. I would encourage all of you to consider this activity and contact Margaret Jones at Bell Labs, (979-5895) to offer your support and assistance.

Also, earlier this year we began an employment listing service and have had some success assisting a member in obtaining new employment.

We were very honored this year to be able to present two Fellow Awards within the section, as well as 15 Centennial Medal Awards. An additional 29 Centennial Awards were given to members within the section who were nominated by other IEEE entities.

To further recognize the Centennial Year, the section purchased a set of 25 "A Century of Electricals" posters. These were displayed at the American Power Conference and the Recognition Dinner. We are working out details with the Museum of Science and Industry for a display there for several months in the near future. We also plan to display them at the Industry Application Society Annual Meeting in Chicago in September, as well as various other meetings in the fall. Please make it a point to view these important re-

(cont.)

minders of our engineering heritage. We have begun planning for a new experimental meeting format next fall. We intend to have a joint dinner meeting with several sub-sections and/or chapters after which individual technical meetings will be held on topics of specific interest to each chapter. We think this format will provide an important opportunity for smaller, less active chapters to enjoy the fellowship of other members.

Finally, I want to thank the Officers, Executive Board and other volunteers in all the chapters and sub-sections for their support in the 1983/84 year. George Thomas and his team will be counting on that support next year and hope that additional volunteers will step forward.

(Editor's Note: The Officers, Executive Board and the other volunteers thank you, Bill for a job well done.)

Bill Everson

W. E. Everson
Section Chairman

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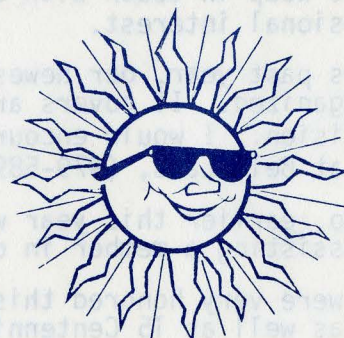
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Have a nice summer.

Look for us in September.

Professional Activity

UPDATE

HOUSE APPROVES FUNDS FOR NASA ACTIVITIES IN FY '85 - The House approved (on March 28) a \$7.5 billion NASA authorization bill that includes extra money for the Advanced Communications Technology Satellite. USAB has advocated the addition of funds for a flight test in the ACTS program in testimony before both House and Senate Subcommittees.

The Administration had requested only \$20.6 million for communications activities, including \$5 million for the restructure of the ACTS program by eliminating the flight portion but continuing technology development and ground tests. The House Science & Technology Committee disagreed with the "restructuring" and proposed an increase of \$40 million to continue the ACTS flight program, as planned. "The Committee (as stated in H. Rept. 98-629, March 21) notes with concern the on-again off-again agency posture with regard to flight demonstration of advanced satellite communications technology. Therefore, the Committee requests that NASA examine the question of recompetition at the outset to assure orderly and timely progress toward successful accomplishment of a flight demonstration program in concert with the user community."

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- AG - AA programmer software engineer seeking entry level position
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- AJ - Technologist specializing in digital development
- AK - Electl.drafting-field changes,updating cable tabs.,revis.& updating master diagrams
- AL - Electrical Engineer - design or research & development gas discharge dev.
- AM - EE with computer & fortran compiler seeks full time fortran progr., N - NW
- AN - Design product engineer - control systems, communications, microwave
- AO - Computer hardware engineer - digital circuit design

If you are an IEEE member and unemployed, call or write for the necessary form. Direct your request to: IEEE Placement Service • 125 South Clark Street - Room 1545 • Chicago, Illinois 60603.

The IEEE and Electric Association waive any responsibility in determining the credibility, accuracy or qualifications of applicants or employers.

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The Motorola Technical Training Center in Schaumburg, Ill. offers intensive three and four day technical courses on Motorola microprocessor families, development systems, and software products. The courses are intended to aid hardware, software, and system designers in the design and implementation of advanced microprocessor based systems. Tuition for three and four day courses is \$495 and \$595 respectively and includes all course materials. Multiple student discounts and courses taught in-plant at your facility are also available. For more information on course content or details on registration, phone (312) 576-7800, or write: Motorola Technical Training Center, 2060 E. Algonquin Road, Schaumburg, Ill. 60195, to the attention of Dave Paloian.

Basic 8-bit Microprocessors MTT1 - The MC6800 June 12-15

MTT1 is a four day course on basic microprocessors using the MC6800 microprocessor. No prior experience is required.

Advanced 16/32-bit Microprocessors MTT8 - The MC68000 June 6-8 Aug 28-31 July 31-Aug 3 MTT20 - The MC68020 Sept 11-14

MTT8 is a four day course on the MC68000 16/32 bit microprocessor. Pin-out, instructions, addressing modes, and exceptions are discussed. Prior processor experience (MTT1) or equivalent is required.
MTT20 is a four day course on the MC68020 32-bit microprocessor. MTT8 is required.

Microprocessor Development Systems MTT13 - EXORmacs System August 14-16 MTT23 - VME/10 System June 26-29

MTT13 is a three day course that presents the EXORmacs multi-user development system running Versados.
MTT23 is a four day course on the VME/10 workstation running Versados.

Motorola Operating Systems MTT15 - Versados and RMS68K July 17-20 MTT18 - System V/68 and "C" September 18-21

MTT15 is a four day course on the RMS68K real-time multi-tasking software that is the kernel of the Versados operating system.
MTT18 is a four day course on System V/68 (UNIX * port to the MC68000). The shell, kernel, disk structure, and "C" are included.

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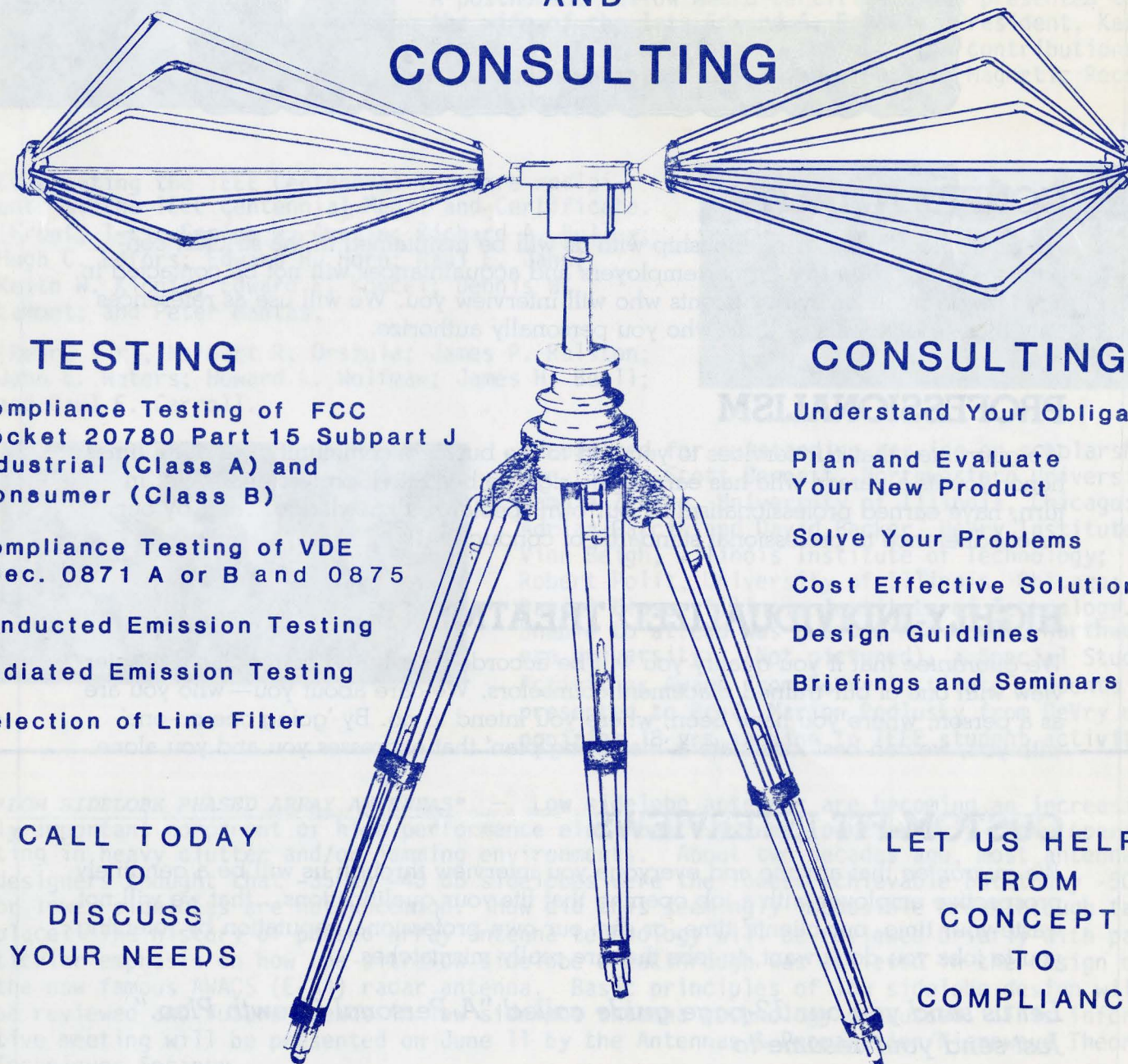
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IEEE 1984 RECOGNITION DINNER



Chicago Section Chairman Bill Everson (l), presents Fellow Award Certificate to Dr. Wolfgang-Martin Boerner, Professor of Electrical Engineering and Computer Science, University of Illinois, Chicago "for advancement in inverse methods in Sensing Systems and in High Resolution Broad Band Doppler Radar Polarimetry."

A posthumous Fellow Award Certificate was presented to the wife of the late Edward A. Roberts, President, Kenton Engineering Corporation, Northbrook "for contributions to Frequency Control and advancements in Magnetic Recording Technology."

Celebrating the IEEE Centennial Year are recipients of the IEEE Centennial Medal and Certificate. (Front, l-r), George W. Austin; Richard A. Bulley; Hugh C. Edfors; Edward H. Horn; Paul E. Jahn; Keith W. Klontz; Edward F. Koncel; Dennis W. Lamont; and Peter Mantas.

(Rear, l-r), Norbert R. Orszula; James P. Ralston; John E. Waters; Howard L. Wolfman; James H. Beall; and Paul F. Carroll.



Recognized for outstanding service or scholarship are (l-r), Scott Bennett, Northwestern University; Pamela Zenino, University of Illinois, Chicago; Adrian Garcia and David Becker, DeVry Institute; Vinn Beigh, Illinois Institute of Technology; Robert Polit, University of Illinois, Chicago; Daniel Blase, Illinois Institute of Technology. Unable to attend was awardee Ann Maret, Northwestern University. (Not pictured), a Special Student Activities Award from DeVry Institute students was presented to Prof. Marion Podluszky from DeVry recognizing 18 yrs. service to IEEE student activities.

"LOW SIDELobe PHASED ARRAY ANTENNAS" — Low sidelobe antennas are becoming an increasingly important component of high performance electronic systems, particularly those operating in heavy clutter and/or jamming environments. About two decades ago, most antenna designers thought that -35 to -40 db sidelobes were the lowest achievable but today -50 db or lower sidelobes are not uncommon. How did this seemingly impossible breakthrough take place? The history of phased array antenna technology will be reviewed briefly with particular emphasis on how the ultralow sidelobe breakthrough was achieved in the design of the now famous AWACS (E-3A) radar antenna. Basic principles of low sidelobe design will be reviewed and future trends in low sidelobe antenna technology discussed. This informative meeting will be presented on June 11 by the Antennas & Propagation/Microwave Theory & Techniques Society.

The speaker, Hal Schrank, Feature Article Author has been with Westinghouse Electric Corporation in Baltimore since 1957 where he is currently an Advisory Engineer in the Antenna Department of the Systems Department Division. He has been an active member of the IEEE Antennas & Propagation Society, as well as the Microwave Theory & Techniques Society since their beginnings. Mr. Schrank was one of the founders of the Baltimore AP/MTT Chapter and served as its first Chairman. He has also served on the MTT ADCOM as Chairman of the Standards Committee and was Vice Chairman of the 1971 MTT Symposium Steering Committee.

As an IEEE member you automatically qualify for membership in any of its 33 technical Societies. Society membership will give you ready access to state-of-the-art meetings and conferences in your technical areas of interest, and to their published proceedings. You will have the opportunity to meet experts from other organizations and to participate in technical activities with today's leaders in engineering and science, industry, government and academia.

Please take this opportunity to broaden your outlook, open your mind to new concepts, new techniques, and new fields of interest. Add one or more Society memberships to your basic IEEE membership now. There will be no better time.

- *Note: You may not pay full year Society fees if you are paying half-year IEEE membership dues.

TRANSACTIONS on Medical Imaging

Additional Information on these and other Society Periodicals, as well as applications for member subscriptions to these periodicals, are available from the IEEE Service Center.

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From the original prospectus of the AIEE,
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Societies	1984 Code	Fees S PUB I.D.	Sept. 1- Feb. 29 Full Year	Mar. 1- Aug. 31 Half Year
Acoustics, Speech and Signal Processing (includes ASSP Mag.)	01	1001	\$ 7.00	\$ 3.50
Aerospace and Electronic Systems	10	1111	15.00	7.50
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Broadcast Technology	02	1011	5.00	2.50
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Journal of Lightwave Technology (Available only with Trans. or JSAC)	19	4301	10.00	5.00
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Computer - (Computer Magazine is mandatory and may not be deleted.)	16	3001	10.00	5.00
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Computer	16	1161	12.00	6.00
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Computer Graphics & Applications Mag.	16	3061	20.00	10.00
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Engineering Management (incl. EM Review)	14	1141	10.50	5.25
Engineering in Medicine and Biology Magazine (Mandatory)	18	3091	11.00	5.50
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Minimum Income Provision. A fifty percent reduction in full annual IEEE dues and Regional Assessment, if any, and Society fees is granted to an applicant for IEEE membership above Student grade who certifies that his/her prior year's annual income did not exceed \$4,000 (U.S. or Equivalent Funds). Those applying for this minimum income provision are requested to submit written certification with the IEEE application. IEEE will then invoice the applicant for the reduced IEEE membership dues and Society fees indicated on the application.

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to be completed by all applicants

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