



**ORLANDO
SECTION
NOTES**

VOLUME XIX
NUMBER 1
SEPTEMBER 1983



**EXECUTIVE COMMITTEE
MEETS SEPTEMBER 6
YOU'RE WELCOME TO ATTEND**

**PUBLISHED BY ORLANDO SECTION
INSTITUTE OF
ELECTRICAL AND ELECTRONIC ENGINEERS**

CHAIRMAN'S CORNER

Look for a moment at the executive committee roster on the inside back cover. I could add three or four names and have a complete roster of the active membership of the Orlando section -- this from a registered membership in excess of 800. The rate at which new faces become active barely keeps up with the burn-out rate.

Presently the Power Engineering/Industrial Applications chapter is in danger of closing up shop due to the lack of anyone to take the helm. Jeff Dick has held the chapter chairman post far beyond his transfer to another area of employment, but stands ready to help any volunteer re-vitalize the chapter. The Vehicular Technology Chapter is presently inactive due to lack of participation, and AES is kept alive by the largely-unassisted efforts of Dave Flinchbaugh.

I won't pretend that volunteering to become active requires only "X" hours per month -- the value to the section and to yourself depends upon the effort expended. However, those of us who are active find the satisfaction is well worth the effort.

Your help is needed. Call any member of the executive committee and let us know the areas of section operation where you are willing to help. Call even if the position is currently occupied.

Ed Ellis, Chairman
Orlando Section IEEE

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FALL SOCIAL

The Fall Social this year will be something different. You are invited to go on a boat cruise down the St. John's River. The trip leaves from the Lake Monroe Harbor in Sanford at 7 P.M. for a four hour trip, returning at 11 P.M. Saturday night is the "Starlight Dinner/Dance" and will be great fun. The new ship, the Star of Sanford, is 122 feet long with two completely enclosed air-conditioned decks and a third sun deck. The Star seats 150 passengers on each of her enclosed decks; her overall passenger capacity is 600.

Tickets will be available from the following board members: (see telephone numbers on back page)

Ed Ellis

Clark Hay

Al Fowler

Frank Fluet

Joe Massett

Russell Theisen

Don Mendorf

George Taack

Bill Strickland

Ben Patz

George McClure

COME ON OUT AND JOIN IN A GREAT BOAT TRIP WITH GOOD FOOD (NOTE: ALL YOU CAN EAT) AND DANCING. COST INCLUDES BOAT TRIP, DINNER, DANCE, AND THE GRATUITY.

DATE: Saturday, October 15, 1983

PLACE: THE STAR OF SANFORD
Lake Monroe Harbor / Sanford

TIME: 7 P.M. - 11 P.M.

Boarding 6:30 P.M. - 7:00 P.M.

COST: IEEE MEMBERS \$25.00

ONE GUEST \$25.00

ALL OTHER GUESTS \$30.00

Senior Citizen Discount: \$2.00

(Must prove you're 55 or older)

MENU: Prime Rib of Beef

Boneless Breast of Chicken with Mushroom Wine Sauce

Broiled Perch with Lemon Butter Sauce & Tartar Sauce

Swedish Meat Balls

Fresh Chilled Shrimp

AuGratin Potatoes

Cheese Broccoli

Buttered Corn

Hot Rolls and Butter

Ice Cream Sundae

Coffee - Tea

Cold Buffet - Salad Bar Varies

BAR: Drinks are *extra*.

There is a full bar on each deck.

DRESS: MEN: Coats with tie optional

WOMEN: Cocktail dresses

POSTPONED

SUMMARIZED MINUTES IEEE EXECUTIVE COMMITTEE MEETING ORLANDO SECTION

Date: August 2, 1983

Location: Stromberg Carlson, 1044 N. Orlando Ave., Winter Park

Attendees: Frank Fluet Bill Stickland
 Don Mendorf George B. Taack, Jr.
 Russ Theisen Ed Ellis
 Clark Hay Dave Flinchbaugh

Minutes:

1. Meeting opened at 5:40 PM by Ed Ellis, Chairman. A quorum was not present.
2. Last meeting's minutes reviewed, no changes requested. Approval deferred until next meeting.
3. Treasurer's Report - Don Mendorf: Summary:

| | | |
|------------------------|------------------|--------------------|
| BALANCE 6/7/83 | Checking Account | \$ 1,600.76 |
| | Dreyfus Fund | <u>\$11,759.79</u> |
| | Total | \$13,360.55 |
| INCOME | \$ 655.56 | |
| EXPENSES | \$1,174.81 | |
| BALANCE 8/02/83 | Checking Account | \$ 1,081.51 |
| | Dreyfus Fund | <u>\$12,011.29</u> |
| | Total | \$13,092.80 |

Approval deferred.

4. Report on June Banquet - George Taack:

The Section paid for six dinners, (2 speakers, plus 2 fellows and their wives). Speaker travel was also paid by Section. In addition, 24 members and 16 guests attended.

5. E.D. - Ed Ellis (for Mickey Mindock):

Ed read a letter from Mickey re: Hi Tech Seminar. Mickey requests the Orlando Section co-sponsor a meeting (\$800 up-front money). IEEE to share 50-50 with other co-sponsor in any income exceeding expenses. Dick Hansen, author of "The New Alchemist", is one of the speakers. Since no quorum was present, this topic will be reviewed and discussed at the Executive Board meeting 8-9-83.

6. Programs - George Taack:

George has been looking into alternate social events since the annual barbecue picnic has not been very successful. An informal survey of some members concerning interest in an evening dinner/cruise on the St. Johns, (a Saturday night, 7PM to 11PM) or a dinner/theater excursion resulted in a 50-50 split. He will continue surveying and set up a tentative date for one of the above.

7. New Business

Bill Kownacki and Al Fowler have both volunteered to take over publications from Gerry White per Ed Ellis.

8. Historian - Russ Theisen:

8A. Russ has acquired additional files from George McClure for the historical records.

8B. Membership summary for the Section as of 6-30-83: 835 members.

8C. Russ is still awaiting final accounting of SOUTHEASTCON expenses from Joe Massett who is waiting for bills to be collected. When final accounting is received the partial reimbursement to the Section of the advance money will be made.

9. AES - Dave Flinchbaugh:

AES growth nationally was 0.4% up to June 83. AES has 34 local active members plus 7 more in arrears. Dave will continue on as Chairman of AES.

10. Comm. - Bill Strickland:

Submitted budget estimate to incoming Treasurer, Clark Hay.

11. An Executive Board meeting will be at Ed Ellis' house, Tuesday, August 9, 1983 at 7:30 P.M. The purpose is to turn over outgoing officers information to the incoming officers and to discuss the coming year's program.

12. Computer - Clark Hay:

Presented budget estimates.

Clark announced a tour of the GE Plymouth facility has been tentatively rescheduled for September.

13. AP - Ed Ellis (for Al Fowler):

Fred Wilcox of Martin Marietta will be the new chairman of AP/MTT for 83-84.

AP/MTT

The Antenna & Propagation/Microwave Theory & Techniques Society (AP/MTT) will hold it's first meeting on September 22 for the purpose of electing a Vice Chairman and Secretary/Treasurer and to discuss plans for this year. The meeting will be at Hewlett Packard facility, Lake Eleanor Drive at 5:30 P.M.

Fred P. Wilcox
Chairman

IEEE SECTION MEETING "THE BUSINESS OF HIGH TECHNOLOGY"

October 22, 1983

8:30 A.M. - 1:30 P.M.

SHERATON TWIN TOWERS
ORLANDO, FLORIDA

The objective of the meeting is to initiate dialogue on the subject of high technology in Central Florida and to discuss the factors affecting high technology growth in the new or small business. The speakers for the meeting will be local and state leaders in high technology.

The keynote speaker will be Dirk Hanson, author of *The New Alchemist*. His book provides an excellent history on the development of silicon valley and on the pervasiveness of the electronics revolution. Mr. Hanson will comment on the essential factors that helped silicon valley grow.

Mr. George Sammet, Jr., Vice President of Materiel of Martin Marietta will address the topic of "Technology in Central Florida". He will comment on the role of large and small business.

Mr. Steve Miller, President of Sawtek, and Mr. Ed Perrott, Vice President of Chip Supply will comment on problems of starting a high technology company in the Orlando area. Mr. William Grimm will discuss the legal issues affecting high technology companies.

Additionally, Mr. Fred Franklin, Al Pozefsky and Al Polfer will discuss the various Florida assistance programs. These topics will include the state's entrepreneurial network, The State Technology Application Center, The Small Business Development Center and the University of Central Florida Research Park.

Costs for the meeting are \$25.00 for IEEE members and \$35.00 for non-members (lunch included). Reservations can be made by sending a check made payable to the IEEE to "The Business of High Technology", P.O. Box 1267, Longwood, Florida 32750. Further information may be obtained from Al Polfer, Director of the Small Business Development Center at the University of Central Florida.

The meeting is co-sponsored by the IEEE, the Small Business Development Center and Sun Banks.

IEEE ORLANDO EXECUTIVE COMMITTEE EXECUTIVE BOARD

| | | Business | Home |
|-------------------|------------------|----------|----------|
| Chairman | T. E. (Ed) Ellis | 339-1600 | 834-3319 |
| Vice Chairman | Frank Fluet | 843-7030 | 339-8905 |
| Secretary | Don Mendorf | 628-9884 | 869-7435 |
| Treasurer | Clark Hay | 339-1600 | 331-5523 |
| Chapters Chairman | Geoffrey Dick | 352-2796 | 678-0979 |

STANDING COMMITTEE CHAIRMEN

| | | | |
|----------------------|-------------------|----------|----------|
| Jr. Past Chairman | Mannie Connell | 841-7450 | 273-8588 |
| Sr. Past Chairman | Ben Patz | 275-2816 | 855-3685 |
| Programs | George B. Taack | 339-1600 | 321-0319 |
| Publicity | David George | 859-5120 | 644-2596 |
| Publications | Al Fowler | 678-2141 | 365-5772 |
| | William Kownacki | 275-2318 | 365-5818 |
| Awards | Joe Massett | 352-3858 | 834-3448 |
| Intersociety Liaison | Richard C. Harden | 855-0881 | 855-5775 |
| Prof. Act. Comm. | John Gilbert | 365-2363 | 859-5492 |
| Student Act. Comm. | Richard Miller | 275-2786 | 892-7337 |
| Education | Fred O. Simons | 275-2405 | 678-1796 |
| Membership Develop. | Deen Khandelwal | 352-2583 | 277-5959 |

SPECIAL COMMITTEES

| | | | |
|---------------------|---------------------|----------|----------|
| By-Laws | Ernest E. Erickson | 275-2310 | 365-5560 |
| SOUTHCON | Bruce E. Mathews | 275-2156 | 645-0549 |
| Advertising Manager | William A. Kownacki | 275-2318 | 365-5818 |
| Historian | Russell E. Theisen | 352-2346 | 674-4139 |
| Member at Large | William C. Cram | | 647-4123 |
| SOUTHEASTCON | Russell E. Theisen | 352-2346 | 671-4139 |

SOCIETY CHAPTER OFFICERS

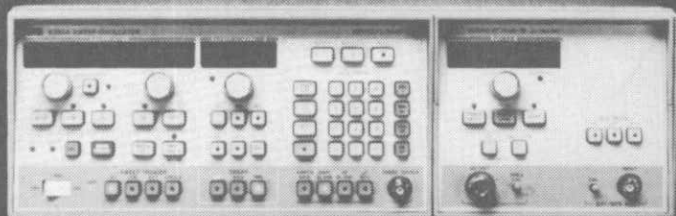
| | | | | |
|---------------|----------------|-------------------|------------|----------|
| AES | Chmn. | Dave Flinchbaugh | 1-268-7252 | 859-4855 |
| Comm. | Chmn. | Bill Strickland | 351-8015 | 351-9185 |
| | V. Chmn. | | | |
| | Secy. | Walt Wolters | 351-9901 | |
| Computer | Chmn. | Clark M. Hay | 339-1600 | 331-5523 |
| | Mbr. V. Chmn. | William Joseph | 352-4126 | 299-7399 |
| Electron Dev. | Chmn. | Ralph M. Mindock | 352-2776 | 862-7764 |
| | Mbr. V. Chmn. | Donald C. Malocha | 275-2414 | 862-5693 |
| | Prog. V. Chmn. | Dick Zanowick | 352-2914 | 645-0831 |
| AP/MTT | Chmn. | Fred Wilcox | 352-2328 | 857-0098 |
| PE / IA | Chmn. | | | |
| | V. Chmn. | Joseph R. Miller | 646-8233 | 644-7049 |

The Executive Committee meets the first Tuesday of each month, except July, at Stromberg-Carlson Training facility, 1044 N. Orlando Ave., Winter Park, FL (Galloway St. side), at 5:30 p.m. All IEEE members are welcome to attend.

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**ORLANDO
SECTION
NOTES**

**VOLUME XIX
NUMBER 2
OCTOBER 1983**

**THE BUSINESS
OF
HIGH TECHNOLOGY**

OCTOBER 22, 1983

8:00 A.M. - 2:00 P.M.

**SHERATON TWIN TOWERS
5780 Major Boulevard
Orlando, Florida 32805**

To attend the meeting please complete the registration form inside.

**PUBLISHED BY ORLANDO SECTION
INSTITUTE OF
ELECTRICAL AND ELECTRONIC ENGINEERS**

CHAIRMAN'S CORNER

On the day the September Section Notes went to press, the operator of the St. John's River Cruises advised that their new ship, the Star of Sanford, would not be delivered in time for our October social. This event will be rescheduled as soon as the ship arrives. Look for announcement in the Section Notes.

This fall the Orlando Section is addressing the subject of personal career development. On Saturday, October 22, the IEEE and the Small Business Development Center at UCF are jointly sponsoring a High Technology Seminar, with emphasis on business startup. Mickey Mindock, who is arranging this session, has assumed an open-minded definition of the term "High Technology", but in any context it implies opportunities for electrical and electronics engineers, as entrepreneurs and as employees. Then on November 10, the section will have a presentation on investments, retirement plans and financial planning.

The Orlando Section has lost another of its dependable active workers. We wish Don Mendorf the best in his new job in North Carolina. His departure vacated the post of section secretary. In accordance with IEEE guidelines, the executive committee has elected a replacement, George Taack. George becomes the third member of the executive committee performing two tasks. Please let us know if you are willing to help with section or chapter operation.

PACE Conference

This conference was held Sept. 2-5 in Phoenix and George McClure attended.

IEEE's work in four councils was described: Member Activities, Career Activities, Government Activities and Technical Activities.

Issues active now include age discrimination, pre-patent invention rights, restrictions on employment in the U.S. of the alien engineers, and portable pensions.

The following resolutions were considered:

- A Task Force should be established to aid the engineer who wants to operate a small business. Passed 64:4
- No actions of USAB should be overruled by the IEEE Board. Passed 45:25
- Chairman of USAB should be selected from among those with prior USAB or PACE experience. Passed 71:7
- The IEEE should drop out of the American Association of Engineering Societies when its present financial commitment has expired. Passed 57:7, 11 abstentions
- The IEEE should lead in the formation of a new umbrella society with the 5 AAES founder societies. Passed 63:6, 11 abstentions

If you would like additional information concerning this conference contact George McClure at 352-3782(ofc), 647-5092(home).

SUMMARIZED MINUTES IEEE EXECUTIVE COMMITTEE MEETING ORLANDO SECTION

Date: September 6, 1983

Location: Stromberg Carlson, 1044 N. Orlando Ave., Winter Park

| | |
|-------------------------------|----------------------|
| Attendees: Frank Fluet | Fred P. Wilcox |
| Deen Khandelwal | Stephen Andrew |
| Wm. C. Cram | Mannie Connell |
| George B. Taack, Jr. | Ed Ellis |
| C. f. Wolters | Ernest Erickson |
| R. Theisen | Mike Haddad |
| George F. McClure | John Gilbert |
| R. M. Mindock | Geoffrey (Jeff) Dick |
| Clark Hay | David E. Flinchbaugh |
| Al Fowler | |

Minutes:

1. Meeting was called to order at 5:35 PM by Ed Ellis, Chairman.
2. Bill Cram moved to approve minutes of August 2 meeting. Seconded by George Taack. Motion carried.

Bill Cram moved to accept August 2 meeting Treasurer's report. Deen Khandelwal seconded. Motion carried.

3. Ed Ellis reported on the Executive Board meeting held Tuesday, August 9th. A main item was approval of advance money of \$800 for "The Business of High Technology" Seminar. Also Clark Hay volunteered to act as IEEE representative to work with Mickey Mindock on the project.
4. Ed Ellis announced that George McClure has agreed to serve as Publicity Chairman for the Section.

5. Programs - George Taack:

An "Investment Information" program is planned for the next Section meeting. Various local investment group representatives will be speaking. Scheduled for November 10, 1983.

George moved for approval of \$80 for fee of meeting room at John Young Museum. Motion was seconded and motion carried.

6. Publicity - George McClure:

A goal of IEEE its Centennial Year is to increase its membership to exceed the quarter-million mark. Publicity for its activities is one way to foster this growth, by gaining visibility for the benefits of membership. A review of the local media (radio, TV, newspapers) shows about forty that should be reached with Orlando Section publicity releases. Assuming an average of 1.5 releases a month, a budget for the publicity function of \$150 will be required for the year.

Chapter and Section program chairmen are requested to provide information about upcoming programs, together with a "grabber" -- some compelling aspect or information about the topic that could be used to hang a story on, to the Publicity Chairman, George McClure, with at least 3 weeks lead time so that publicity can be arranged for it.

7. Deen Khandelwal again requested that local conference activities be listed in the Section Notes. Russ Theisen has compiled a list and will provide a copy to the Publications Chairman.

8. Publications - Al Fowler:

The new deadline for material to be included in the Section Notes is at least 8 days before the Executive Committee meeting which is the first Tuesday of each month.

9. Intersociety Liaison - (Florida Engineering Society)

Clark Hay will contact Dr. Richard Harden and volunteer to fill in for him if he is unable to attend the Section meetings due to class schedule.

10. PACE - John Gilbert:

George McClure attended and reported on a PACE conference which took place in Phoenix, September 2 thru 5.

John Gilbert and George McClure have booklets detailing all the National elected Government officials. Contact them to learn who to communicate with concerning specific issues. John Gilbert also read a letter from Ron Wojtesinski who is campaigning for Region 3 Director of IEEE.

11. John Gilbert moved that the Executive Committee endorse Ron Wojtesinski as a candidate for Region 3 Director. Seconded by Ernie Erickson. Discussion followed concerning the pros and cons of the Executive Committee supporting individual candidates. When called to a vote, the motion failed.

12. Membership Development - Deen Khandelwal:

He has sent about 60 letters of welcome to new area members of IEEE in the last three months. He also sent about 60 letters to encourage members to become senior members.

Deen suggested that we again print in the Section Notes the list of senior members and fellow members for ease in finding contacts for references in applying for Senior Membership. Deen is preparing a list of new members for use in distributing IEEE cups.

13. By-Laws - Ernie Erickson:

No report. George McClure and George Taack volunteered to be members of the By-Laws Committee since Don Mendorf is leaving.

14. SOUTHCON - George McClure reported for Bruce Matthews:

George requested names of an individual from various local corporations for the "INNER CIRCLE", to act as a "contact" person to distribute SOUTHCON announcements, etc. Russ Theisen requested volunteers for assisting registration at SOUTHCON. Geoffrey Dick, Joe Massett had previously volunteered, George Taack, and John Gilbert also volunteered.

15. Historian - Russ Theisen:

Russ presented a check to the Treasurer for \$274 which was the result from "Tutorial Week" held last April.

16. SOUTHEASTCON - Russ Theisen:

We will have a loss of approximately \$1,010.71 for both Region 3 and Orlando Section for the previous SOUTHEASTCON conference. The final report is due out September 10.

17. ED - Mickey Mindock:

Mickey discussed the upcoming "Business of High Technology" Seminar.

A letter was prepared and sent to all members of the Electron Device Society detailing activities for the Fall. These include:

22 October 1983 Section meeting with Dirk Hanson as the Speaker

- 12 December 1983 EDS meeting with Professor Lester Eastman of Cornell University - The EDS National lecturer
- 17-19 January 1984 Session on electronic devices and materials at SOUTHCON
- March 1984 The society is discussing a possible joint meeting with the American Vacuum

18. AP/MTT - Fred Wilcox:

Next meeting is for September 22nd and will be an organizational meeting. See Section Notes for more detail.

19. Chapter's Chairman - Jeff Dick:

Jeff reported on his coordinating the scheduling of Chapter meetings for the next few months. No conflicts so far.

20. PE/IA - Jeff Dick:

Jeff has prepared a letter for mailing to PE/IA members in the Orlando Section requesting volunteers for PE/IA Chapter Officers.

21. Ed Ellis pointed out that Don Mendorf in leaving has vacated the Executive Committee secretary's position. Ed opened the floor for nominations. George Taack was nominated. Russ Theisen moved to close nominations, Bill Cram seconded. Motions to close nominations carried. George Taack was unanimously approved for the position.

22. **Membership Statistics:** Russ Theisen reported the latest IEEE membership report: As of July 31, 1983, total Orlando Section Membership is 825 plus 63 students. The membership report is in the secretary's records if anyone would like a more detailed breakdown.

23. **New Business:** Ed Ellis made note to contact George McClure if anyone is interested in establishing an Electromagnetic Compatibility (EMC) Society chapter here.

24. Bill Cram moved to adjourn. George Taack seconded. Motion carried. Meeting adjourned at 7:31 PM.

25. Next meeting is Tuesday, October 4, 1983, same time and place.

OCTOBER 1983

| SUNDAY | MONDAY | TUESDAY | WEDNESDAY | THURSDAY | FRIDAY | SATURDAY |
|--------|-----------------------------------|--|-----------------------|----------|--------|--|
| | | | | | | 1 |
| 2 | 3 | 4 EXECUTIVE COMMITTEE SECTION MEETING 5:30 PM | 5 | 6 | 7 | 8 |
| 9 | 10 COLUMBUS DAY OBSERVED | 11 COMPUTER SOCIETY MEETING AT BUFF'S 6:30 PM | 12 COLUMBUS DAY | 13 | 14 | 15 |
| 16 | 17 | 18 IND APPL & POWER ENGR SOC: ORGANIZATION AND PLANNING MEETING 7:30PM | 19 | 20 | 21 | 22 SECTION MEETING BUSINESS OF HI TECHNOLOGY: SHERATON TWIN: |
| 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| 30 | 31 HALLOWEEN | | | | | |

THE BUSINESS OF HIGH TECHNOLOGY

This issue of the Section Notes highlights the Section Meeting "The Business of High Technology". This meeting is unique. *The dialogue that is being created is important for Central Florida and for the State of Florida.*

Central Florida is a dynamic growth area. The concentration of companies in electro-optics and robotics, the major expansion projects underway or being planned by Harris and Martin Marietta, and the new engineering building for the University of Central Florida provide all the ingredients for Central Florida to become a major technological center for the nation.

In order for "high technology" to flourish in the state there has to be a greater understanding of the many aspects of running a company by the technologist and an understanding by the local business community of the needs of a company dealing with new technologies.

For the past few months I have been meeting with a number of local leaders. It has been our objective to establish a forum for the discussion of high technology and to aid in the creation of a network to help those interested in establishing businesses in the Central Florida area. We have focused our attention on "The Business of High Technology" meeting.

Key individuals from Central Florida have been selected as speakers. Mr. George Sammet, Jr. from Martin Marietta will discuss the role of the large and small business in developing technology. Mr. Steve Miller from Sawtek and Mr. Ed Perrott from Chip Supply will provide insight on how their "high tech" companies got started in the Orlando area. Mr. Fred Frankland from the Florida Department of Commerce will inform us on the state's new business activities. From the University of Central Florida, Al Polfer will acquaint us with the services of the Small Business Development Center and the University Research Park. Dr. A. Pozefsky will explain the State Technology Applications Center. Mr. William Grimm, partner of the Orlando Law Firm of Piersol, Boroughs, Grimm & Bennett, will discuss legal issues in a developing company.

To provide an overview on technological growth Mr. Dirk Hanson, author of *The New Alchemist*, will be the luncheon speaker. Mr. Hanson's book is an excellent history of the development of Silicon Valley.

In addition, a number of local firms are providing booklets. Examples are "Raising Venture Capital", "Strategies for Going Public", "Outline of a New Venture Plan" and "Mapping High Tech's Future". Other handouts will be provided by the Small Business Administration and High Technology Magazine

The IEEE is proud to participate in the development of Central Florida and I would like to encourage all IEEE members to attend the meeting by completing the registration form within these Section Notes.

R. M. Mindock
The Business of High Technology
Meeting Chairman

THE BUSINESS OF HIGH TECHNOLOGY MEETING AGENDA OCTOBER 22, 1983

| | | |
|--------------------|--|----------------|
| 8:00 - 8:45 a.m. | Registration | |
| 9:00 - 9:10 a.m. | Welcome | R. M. Mindock |
| 9:10 - 9:40 a.m. | Technology in Central Florida | G. Sammet, Jr. |
| 9:40 - 10:10 a.m. | Economic Development in Florida | F. Frankland |
| 10:10 - 10:20 a.m. | State Technology Applications Center | A. Pozefsky |
| 10:20 - 10:40 a.m. | Small Business Development Center/ University Research Park | A. Polfer |
| 10:40 - 10:50 a.m. | Break | |
| 10:50 - 11:20 a.m. | Sawtek | S. Miller |
| 11:20 - 11:50 a.m. | Chip Supply | E. Perrott |
| 11:50 - 12:20 | Legal Issues in High Technology Companies | W. Grimm |
| 12:30 - 1:15 p.m. | Lunch | |
| 1:15 - 1:20 p.m. | Introduction of Luncheon Speaker | C. Mentzer |
| 1:20 - 1:50 p.m. | Toward The Silicon Future | D. Hanson |
| 1:50 - 2:00 p.m. | Open Discussion | |

"THE BUSINESS OF HIGH TECHNOLOGY" ACKNOWLEDGEMENTS

Chairman
Vice Chairman
Arrangements
Publicity

Ralph M. Mindock
Al Polfer
Clark Hay
Duane Williams
George McClure

Acknowledgement is also given to the informal committee on High Technology in Central Florida for their active participation in the planning and promotion of this meeting. Some key participants are listed below:

John M. Bava
Deloitte, Haskins & Sells
Stephen G. Brown
Touche Ross & Co.
Mac Carraway
Arthur Andersen & Co.
Jack Doherty
World Sales Development
William Grimm
Peirsol, Boroughs, Grimm & Bennett
Ralph D. Gunter
Central Florida Research Park
Russ Hamlin
Coopers and Lybrand
Donald Hampton
Russ-Hampton, Inc.
Clark Hay
Stromberg-Carlson
Don Malocha
University of Central Florida

Carl Mentzer
Sun Banks, N.A.
Ralph M. Mindock
Martin Marietta
Roger Pickar
Marketing Consortium, Inc.
Jody Phillips
Florida Dept. of Commerce
Al Polfer
Small Business Development Center
Al Pozefsky
State Technology Applications Center
John Rhodes
Naval Training Equipment Center
Lynn D. Simmons
Employer's Assoc. of Fla.
Rich Tesch
Industrial Dev. Commission
Alan Weinstein
Arthur Young

A special thank you is given to Sun Banks, N.A. for providing arrangements for Dirk Hanson and to High Technology Magazine for promotional assistance.

MEMBERSHIP

The Orlando Section welcomes the following **new IEEE Members.**

| | |
|--------------------------|---------------------|
| Donald R. DeZutter | Jack D. Cooper |
| Michael D. Mihaly | C.H. Hargraves, Jr. |
| Michael H. Amend | Larry Jens |
| Marshall L. Brewton, Jr. | Janet M. Minks |
| Keith V. Lindsay | Brian J. Kaldenbach |
| Jeffrey O Brien McGee | Ed Margol |
| Kenneth C. Farley | Michael T. McCord |
| Edward M. Holler | Bonita Sivi |
| Pamela S. Woodard | Simon A. Tysall |
| Larry C. Andrews | Linda L. Wilkes |

The Orlando Sections welcomes the following IEEE members moving into the section.

| | |
|-----------------------|----------------------|
| Joel Z. Futterman | Robert F. Gray |
| Brent H. Horine | Eddie Y. Hwang |
| Layne Jordan | E.I. King, Jr. |
| Kevin C. Kozminski | Joseph J. Krupar |
| Gerald D. Madonia | Henry S. Maxson |
| Lon W. Montgomery | Robert W. Robisch |
| Millard F. Smith | Jay A. Shulman |
| Kenneth T. Venuti | Stephen Andrew |
| Arthur J. Athens | J.D. Basil, Jr. |
| Robert C. Bethel | Richard A. Cobb |
| Ronald D. Coutts | David R. Eland |
| Edwin K. Evenson Rpe | John M. Hilditch |
| David J. Parsons, Jr. | Kevin Lee Steinke |
| Mary Terry | Edward D. Berg |
| Dale I. Gorden | Dean Hanson |
| G.W. Huff | Joseph D. Hurley |
| John S. Kennedy | Thomas G. Picard |
| Donald G. Ramey | William P. Reed, Jr. |
| Chris Rourk | Jerry S. Sellers |
| Harold W. Tomlinson | Larry W. Wakefield |

Members of IEEE in the Orlando Section have been requested to consider applying for upgrading their membership to senior member grade. We have many who are qualified. If you need references please contact me.

D.D. Khandelwal
Chairman, Membership
Development Committee

THE BUSINESS OF HIGH TECHNOLOGY

OCTOBER 22, 1983

REGISTRATION

8:00 A.M. - 8:45 A.M.

PROGRAM

9:00 A.M. - 2:00 P.M.

LOCATION

SHERATON TWIN TOWERS

5780 Major Boulevard

Orlando, Florida 32805

Cost for the program will be \$35.00 per person (\$25.00 for IEEE members) including luncheon. Registration must be postmarked no later than October 15th to be included for lunch.) Also, requests for refunds must be made at least 7 days before the scheduled program.

Please enroll me for: **The Business of High-Technology**

Name _____ Last _____ First _____ MI _____

Firm _____ Telephone(_____) _____

Address _____

I am enclosing \$ _____

(\$35 per person including lunch)

(\$25 for IEEE Members—

My Membership number is _____)

Note: Requests for refunds must be made at least 7 days before the scheduled program.

Make check payable to the IEEE and send to:

P.O. Box 1267

Longwood, Florida 32750



STAMPS

Finally, the Electrical Engineering Profession is being honored with the issue of a block of four 20¢ stamps. You've probably read about this. If not, grab the August edition of SPECTRUM. The first day of issue was Sept. 21, so run down to your local post office and get some. Let's plaster all our letters with these stamps. We'll have a chance to explain to our friends just who Steinmetz, Armstrong, Tesla and Farnsworth were, so better review our history.

CUPS

Yes, we are really in our cups! We have these fine durable ceramic coffee mugs made specially for the Orlando section with the caption "I am an Orlando Engineer". Everyone of us should have one—not just for coffee, tea or pencils, but to promote the name of our professional organization. The executive committee has made them available at below cost price of only \$2. Contact any one of the executive committee to get one. (See telephone numbers on back page)

COMMUNICATIONS SOCIETY

The IEEE Communications Society of the Orlando Section cordially invites all electronics and electrical engineers to join the society and participate in the planned activities. Visitors are also welcome to attend all activities. There is no meeting scheduled for October.

ANTENNA AND PROPOGATION MICROWAVE THEORY & TECHNIQUES SOCIETY AP/MTT

The first meeting of the year was held on Sept. 22. Topics discussed were:

1. Getting better attendance
2. What type of papers would be of most interest.

Attendance at the meeting — 3

Fred Wilcox
Chairman

SECTION MEETING

Everyone is invited to come to the first Section wide meeting of the year. It will be held in November and will have a topic of:

Investments for - Retirement

KEOGH

IRA

Tax Shelters

There will be representatives from the Savings & Loan, Banking, and Investment industries to discuss investments in their respective areas. Mrs. Pat Nix of Coral Gables will represent the savings and loans. Banking will have representatives from Sun Bank. Mr. Jerry Wall of Variable Investment Plan, Inc. will present a general planned approach to investments. Each person will make a presentation and then the meeting will be opened to questions.

DATE: Thursday, November 10, 1983

TIME: 7:30 PM

LOCATION: John Young Science Center
810 E. Rollins Street
Orlando

Don't miss a meeting filled with good information.

**IEEE COMPUTER SOCIETY
MEETING
TUESDAY OCTOBER 11th 6:30 P.M.
DUFF'S SMORGASBORD \$4⁰⁰ ALL U CAN EAT
965 W. SR 436 ALTAMONTE SPRINGS
NW CORNER OF 434 & 436 NEAR K-MART**

Reservations are not necessary but would be appreciated.

Clark Hay 339-1600 x171 or 331-5523

INSIDE THE COMPUTER SOCIETY

SPEAKER: Russ Theisen

Candidate for 2nd V-P of Computer Society

A look at the inner workings of our society - services available, conferences, tutorials, how things get done, Who's Who.

The Computer Society is the largest and the fastest growing of all the IEEE Societies. It is larger than nearly every technical society in the world (excepting the IEEE, itself).

Most members are not aware of the wide variety of services and opportunities available through the Computer Society. This meeting will provide a lot of information to help you get the most out of your dues dollar. You will learn of service opportunities in the local Section, the Region, and on Society-level committees which will help you grow professionally. Non-members are welcomed. Come find out what we have to offer.

Russ Theisen is highly qualified to give us this inside look. He is a former Orlando Computer Society Chapter Chairman, Orlando Section Chairman, Computer Society Treasurer, and is currently running for Second Vice-President of the Computer Society. Further details are on page 120 of the September 1983 issue of Computer magazine.

**THE POWER ENGINEERING SOCIETY
AND
THE INDUSTRY APPLICATIONS GROUP
ELECTION MEETING**

DATE: October 18, 1983

TIME: 7:30 PM

PLACE: Florida Power Corp.
510 S. Park Avenue
Winter Park, Fla

An organization and planning meeting will be held, open to all members. Nominations for new officers will be entertained and elections will be held. Come meet your fellow members and hear the latest on issues of the day relating to your profession.

IEEE ORLANDO EXECUTIVE COMMITTEE EXECUTIVE BOARD

| | | Business | Home |
|-------------------|------------------|----------|----------|
| Chairman | T. E. (Ed) Ellis | 339-1600 | 834-3319 |
| Vice Chairman | Frank Fluet | 843-7030 | 339-8905 |
| Secretary | George Taack | 339-1600 | 321-0319 |
| Treasurer | Clark Hay | 339-1600 | 331-5523 |
| Chapters Chairman | Geoffrey Dick | 352-2796 | 678-0979 |

STANDING COMMITTEE CHAIRMEN

| | | | |
|---------------------------|------------------|------------|----------|
| Jr. Past Chairman | Mannie Connell | 1-784-7000 | 273-8588 |
| Sr. Past Chairman | Ben Patz | 275-2816 | 855-3685 |
| Programs | George B. Taack | 339-1600 | 321-0319 |
| Public Relations Chairman | George McClure | 352-3782 | 647-5092 |
| Publications | Al Fowler | 678-2141 | 365-5772 |
| | William Kownacki | 275-2318 | 365-5818 |
| Awards | Joe Massett | 352-3858 | 834-3448 |
| Fla. Eng. Soc. Liaison | Clark Hay | 339-1600 | 331-5523 |
| Prof. Act. Comm. | John Gilbert | 365-2363 | 859-5492 |
| Student Act. Comm. | Richard Miller | 275-2786 | 892-7337 |
| Education | Fred O. Simons | 275-2405 | 678-1796 |
| Membership Develop. | Deen Khandelwal | 352-2583 | 277-5959 |

SPECIAL COMMITTEES

| | | | |
|---------------------|---------------------|----------|----------|
| By-Laws | Ernest E. Erickson | 275-2310 | 365-5560 |
| SOUTHCON | Bruce E. Mathews | 275-2156 | 645-0549 |
| Advertising Manager | William A. Kownacki | 275-2318 | 365-5818 |
| Historian | Russell E. Theisen | 352-2346 | 671-4139 |
| Member at Large | William C. Cram | | 647-4123 |
| SOUTHEASTCON | Russell E. Theisen | 352-4320 | 671-4139 |

SOCIETY CHAPTER OFFICERS

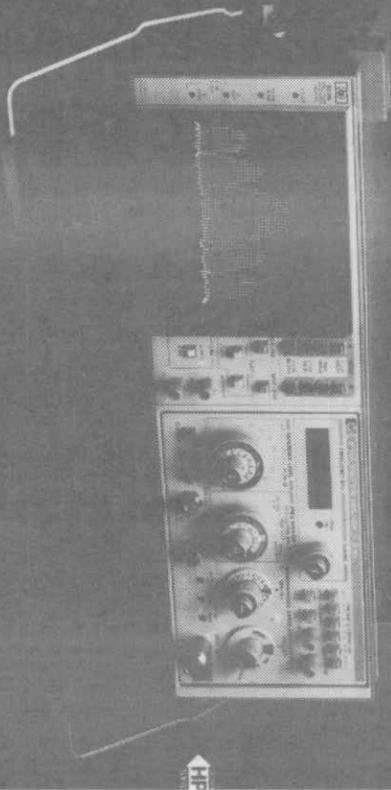
| | | | | |
|---------------|----------------|-------------------|------------|----------|
| AES | Chmn. | Dave Flinchbaugh | 1-268-7252 | 859-4855 |
| Comm. | Chmn. | Bill Strickland | 351-8015 | 351-9185 |
| | V. Chmn. | Walt Wolters | 351-8010 | 855-5945 |
| | Secy. | Mike Oleyar | 339-1600 | 876-3582 |
| Computer | Chmn. | Clark M. Hay | 339-1600 | 331-5523 |
| | Mbr. V. Chmn. | William Joseph | 352-4126 | 299-7399 |
| Electron Dev. | Chmn. | Ralph M. Mindock | 352-2776 | 862-7764 |
| | Mbr. V. Chmn. | Donald C. Malocha | 275-2414 | 862-5693 |
| | Prog. V. Chmn. | Dick Zanowick | 352-2914 | 645-0831 |
| AP/MTT | Chmn. | Fred Wilcox | 352-2328 | 857-0098 |
| PE / IA | Chmn. | | | |
| | V. Chmn. | Joseph R. Miller | 646-8233 | 644-7049 |

The Executive Committee meets the first Tuesday of each month, except July, at Stromberg-Carlson Training facility, 1044 N. Orlando Ave., Winter Park, FL (Galloway St. side), at 5:30 p.m. All IEEE members are welcome to attend.

ORLANDO SECTION
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**ORLANDO
SECTION
NOTES**

VOLUME XIX
NUMBER 3
NOVEMBER 1983

**FIRST
SECTION MEETING
OF THE YEAR!**

**COME GET THE LATEST ON
INVESTMENTS FOR:**

**Retirement
KEOGH
IRA
Tax Shelters**

**THURSDAY, NOVEMBER 10, 1983
7:30 P.M.**

John Young Science Center

**PUBLISHED BY ORLANDO SECTION
INSTITUTE OF
ELECTRICAL AND ELECTRONIC ENGINEERS**

CHAIRMAN'S CORNER

There's good news and there's bad news this month. We have four new volunteers willing to help with Chapter activities, plus a volunteer to help at Section level after a brief absence. At the same time, we are losing a very active member of the Executive Committee.

Clark Hay is moving to California. Clark has contributed greatly to the success of numerous conferences, seminars and tutorials locally, and has been serving as Section Treasurer, Computer Society Chapter Chairman, and Representative to the Florida Engineering Society. He will be missed.

Carl Schuneman, of Martin Marietta and the AP/MTT Chapter, has been elected to succeed Clark as Treasurer, and Steve Forsyth, of Stromberg-Carlson, has been elected Chairman of the Computer Chapter. The Power Engineering and Industry Applications Chapter is being revitalized under chairmanship of Mike Haddad of Westinghouse. Avalino Gonzalez (Westinghouse) and Sally Merry (private consulting practice) will be working with Mike.

Have you noted the term "genius" as applied to computer hackers who gain illegal access to computers used by industry and the government -- and the implied approval given these activities by the media? Have you noted any similar recognition of the professional in Computer Science and the programmers who labored long and hard to put those systems into service initially? Similarly, consider the recognition given robotics applications and satellite communications, the ho-hum acceptance of commercial electrical power and telephone service anywhere any time, as compared to the recognition of the engineering effort necessary to make all these possible. I don't believe IEEE members place great importance on individual recognition by the general public, but the image of Engineering as an occupation certainly needs enhancement. As part of the IEEE Centennial Year activities, George McClure is working toward better recognition of Electrical/Electronic Engineering as a profession. If any of you have contributions -- if you publish a book, present a paper, attend a conference, receive a promotion, are willing to prepare an article for the local media -- please let George know.

SECTION MEETING

DATE: Thursday, November 10, 1983

TIME: 7:30 P.M.

LOCATION: John Young Science Center
810 E. Rollins Street, Orlando

The Section Meeting will furnish an introduction into the topic of:

INVESTMENTS FOR - Retirement

Keogh

IRA

Tax Shelters

The meeting will have as speakers the following industry representatives:

- A) Coral Gables Savings & Loan - Mrs. Pat Nix
- B) Sun Bank - Mr. Bruce Bridges
- Mr. Elliott Perny
- C) Variable investment plan - Mr. Harold Lanigan
- Mr. Jerry Wall

There will be presentations made to acquaint us with possible investments in the respective areas of banking, savings & loan, and investment industries. In addition, a general planned approach to investments will be presented by Mr. Jerry Wall which is designed to help engineers contemplating a program to have a sound footing on which to base their approach.

After the presentations are over, the meeting will be opened to questions. With the changes that have taken place in the last few years, this meeting should be a must for everyone.

Reservations are not required, but to assist the speakers in how many handouts are needed and to make sure everyone has a seat, it would be appreciated if reservations were indicated to either of the following:

Stromberg-Carlson 339-1600

George Taack Ext. 200

Ed Ellis Ext. 203

See you there!

IEEE EXECUTIVE COMMITTEE MEETING ORLANDO SECTION

Date: October 4, 1983

Location: Stromberg Carlson, 1044 N. Orlando Ave., Winter Park

| | |
|-----------------------------|------------------|
| Attendees: George Taack | Ed Ellis |
| Geoffrey (Jeff) Dick | C.F. Wolters |
| Clark Hay | Ralph M. Mindock |
| Frank Fluet | Fred P. Wilcox |
| George F. McClure | John D. Gilbert |
| J.C. Massett | |
| Russ Theisen (arrived late) | |

MINUTES:

1. Meeting was called to order at 5:37 p.m. by Ed Ellis, Chairman. It was noted that it required 13 to be present to constitute a quorum. The meeting continued as a non-voting meeting awaiting a quorum.
2. Approval of the September minutes was deferred due to the lack of a quorum.
3. **Treasurer's Report - Clark Hay:**

Balance 8/2/83, 9/2/83

| | |
|------------------|------------------|
| Checking account | \$ 1,081.51 |
| Dreyfus Fund | <u>12,011.29</u> |
| Total | \$13,092.80 |

Transfers

None

Income

| | |
|----------------------|---------------|
| Advertising | \$ 274.00 |
| Hi-Tech Seminar Reg. | <u>545.00</u> |
| | \$ 819.00 |

Expense

| | |
|---------------------------|---------------|
| Seminole House Printers | \$ 187.43 |
| Altamonte Data Processing | 79.43 |
| Postage - MTT | 52.00 |
| Postage - ED | 28.00 |
| Hi-Tech Seminar mailing | <u>587.10</u> |
| | \$ 933.96 |

Balance 10/4/83

| | |
|------------------|------------------|
| Checking account | \$ 966.55 |
| Dreyfus Fund | <u>12,011.29</u> |

Total

\$12,977.84

Approval of the treasurer's report was deferred due to the lack of a quorum.

President's Report - Ed Ellis:

4. It was announced that Clark Hay was moving to China Lake, CA and a new treasurer would have to be elected. Since a quorum was not present, the election was postponed until new business.

5. Programs - George Taack:

Section meeting scheduled for November 10, 1983 is set except for the name of the Sun Bank representative which should be available within a week. The John Young Science Center requires payment ahead for the room. The bill was submitted to the treasurer.

Nothing has been done at this time to set up the Engineer's week banquet in February 1984.

It was reported that the Hi-Tech Seminar was progressing nicely, and the number signed up was over 25. The income from registration has almost offset the cost of the mail out. The current response indicates that the seminar should be a financial success.

6. Public Relations - George McClure:

The letterhead for news releases was received from headquarters and will be available for future use. A copy of the release on the Hi-Tech Seminar is attached. The IEEE facts sheet is being revised and one will be sent when completed.

It is planned to visit the different people that the news releases are sent to show them there is a person behind them.

The only grabbers received was from Ft. Lauderdale. There have been none from the Orlando section.

7. Publications - Al Fowler:

Ed Ellis reported that Al Fowler had a death in the family and was out of town. The printer had a problem getting the notes out, and they were not delivered to the mailer until Friday. The notes went into the mail Monday. It was reported that 960 copies were mailed, and there was a possibility that the number printed may have to be increased. The extra copies of the current notes will be used at the Hi-Tech Seminar.

8. Awards - Joe Massett:

IEEE is awarding Centennial Medals (small bronze medallions) in recognition of IEEE service or electrical engineering achievements for the 100th year celebration.

The number of medals awarded is limited to a proportion of the section membership, so not all nominees may receive a medal.

Requests for nominations for the Engineer of the Year Award is to be published in the next section notes.

9. Intersociety Liaison - Clark Hay:

Florida Council of IEEE - Mickey Mindock attended the September 10, 1983 meeting. The meeting was not well attended and a mailing on the meeting was made to Florida Council members and officers of Florida sections. (Attachments of the minutes, the FCIEEE Treasurers Report, a copy of the Draft Bylaws, and the agenda for meeting of Informal Committee of IEEE for September 28, 1983 was to be attached to these minutes, but they were not received by the secretary.)

Florida Engineering Society - No report.**10. PACE - John Gilbert:**

No report. Ed Ellis reported that comments were being solicited on a position paper.

11. Student Activity - Richard Miller:

No report due to no representation.

12. Education - Fred O. Simons:

No report due to no representation.

13. Membership Development - Deen Khandelwal:

No report due to no representation.

14. By-Laws - Ernest E. Erickson:

George McClure reported that the committee had not met, but it would try to meet before the next board meeting.

15. SOUTHCON - Bruce E. Mathews:

No report due to no representation.

16. Advertising Manager - William A. Kownacki:

No report due to no representation.

17. Historian - Russell E. Theisen:

No report

18. SOUTHEASTCON - Russell E. Theisen:

The final report on the 1983 conference was submitted to the secretary. The following statistics were taken from the report:

Attendance:

| | |
|---------------------|------------|
| IEEE Members | 176 |
| non-members & MISC. | 138 |
| students | <u>451</u> |
| Total | 765 |

Finance Summary:

| | |
|------------------------|------------------|
| Income | \$53,226.55 |
| Expences | <u>48,770.58</u> |
| Gross Profit | \$ 4,455.97 |
| Loan advance repayment | <u>5,000.00</u> |
| Net Loss | (\$ 544.03) |

The lost of \$544.03 is to be shared equally between region 3 and the Orlando Section.

Society Chapter Reports**19. AES - Dave Flinchbaugh:**

No report due to no representation.

20. Communications - Walt Wolters:

It was reported that Bill Strickland had resigned as chairman of the Communications Society due to increased business and personal commitments. Copy of resignation is attached. Walt Wolters reported that he would be unable to step up from Vice Chairman due to the break up of AT&T. No replacement has been found. No meetings are currently scheduled. A letter similar to the one used by PES & IA is to be sent out to see if there is anyone interested in getting involved.

21. Computer - Clark Hay:

The September meeting was held at the GE Robotics plant and was attended by 22 people. It was reported that the group from the Westinghouse robotics could not attend because GE would not allow them in the plant. It was felt that in the future an IEEE meeting should be open to any member who wishes to go. Clark Hay is writing a letter thanking GE for the tour but chastising them from excluding some members.

The October meeting is to be held on the 10th at Duff's in Altamonte Springs. The speaker will be Russ Theisen speaking on the subject of "Inside The Computer Society". In addition to the program, an election of a new chairman will take place. Stephen E. Forsythe will be nominated with other nominations possible from the floor.

22. Electron Devices - Ralph M. Mindock:

No additional report over what had already been reported.

23. AP/MTT - Fred Wilcox:

The September meeting was only attended by 3 people. It was felt that a letter should be sent out to try to stir some interest in future meetings. No other officers other than the chairman has been elected.

24. PE/IA - Geoffrey Dick:

The next meeting will be on October 18, 1983. The meeting will be held to elect new chapter officers. The letter Jeff Dick sent out had a reply rate of 42% with someone volunteering for each office. It was noted that C. M. Hines had been deceased for three years. The secretary is to contact headquarters to see how his name can be removed from the file.

25. Chapters Chairman - Geoffrey Dick:

Meeting calenders for each month through December was handed out, and a request was made to let Jeff know of any meetings which were not listed. Two meetings were added. Updated copies are to be available at the next board meeting.

26. Old Business

There was none.

27. New Business

There has been no response to forming an EMC chapter. The announcement was in the minutes but will not appear in the section notes until next month.

It was reported that there is interest in forming a chapter of the Instrumentation & Measurement Society in Florida in Orlando or joint with Canaveral and Orlando. They would be willing to pay any promotional expenses incurred in getting a chapter started.

An inquiry has been received about Orlando hosting the Instrumentation & Measurement Society's International Measurements & Test Conference in 1985. It would be attended by approximately 200 people from around the world. It could be structured in a way that the Orlando Section could do as much or as little as they wanted. They would guarantee no monetary loss to the Orlando Section. George McClure is to look into hosting the conference and make a recommendation at the next meeting.

It was announced that an election would have to be held to elect a new treasurer to take Clark Hay's place. After consulting a copy of the bylaws, it was determined that a quorum was not required for the election. Ed Ellis nominated Carl Schunemann. John Gilbert moved he be elected by acclamation. Seconded by Jeff Dick. Motion carried.

IEEE is trying to get 250,000 members and has started a program to give \$15 credit for all but membership dues to anyone bringing in a new member.

A new FES representative is needed. Ed Ellis is to call Dr. Harden.

28. Walt Wolters moved to adjourn. Jeff Dick seconded. Motion carried. Meeting adjourned at 6:35 PM.

29. Next meeting is Tuesday, November 1, 1983, same time and place.

CUPS

Yes, we are really in our cups! We have these fine durable ceramic coffee mugs made specially for the Orlando section with the caption "I am an Orlando Engineer". Everyone of us should have one—not just for coffee, tea or pencils, but to promote the name of our professional organization. The executive committee has made them available at below cost price of only \$2. Contact any one of the executive committee to get one. (See telephone numbers on back page)

REVISED ON: 10/17/83

| NOVEMBER 1983 | | | | | | |
|---------------|--------|---|---|---|-----------------|----------|
| SUNDAY | MONDAY | TUESDAY | WEDNESDAY | THURSDAY | FRIDAY | SATURDAY |
| | | 1 EXECUTIVE COMMITTEE SECTION MEETING 5:30 PM | 2 | 3 | 4 | 5 |
| 6 | 7 | | 9 ANTENNA PROPAGATION MICROWAVE THEORY AND TECHNIQUES | 10 SECTION MTG INVESTMENTS JOHN YOUNG SCIENCE CENTER: 7:30 PM | 11 VETERANS DAY | 12 |
| 13 | 14 | 15 COMPUTER SOCIETY MEETING | 16 COMMUNICATIONS SOCIETY MEETING | 17 JOINT AES & ROBOTICS INT: PLANT TOUR OF FMC 7:30 PM | 18 | 19 |
| 20 | 21 | 22 | 23 | 24 THANKSGIVING DAY | 25 | 26 |
| 27 | 28 | 29 | 30 | | | |

IEEE ORLANDO EXECUTIVE COMMITTEE EXECUTIVE BOARD

| | | Business | Home |
|-------------------|------------------|---------------|----------|
| Chairman | T. E. (Ed) Ellis | 339-1600 | 834-3319 |
| Vice Chairman | Frank Fluett | 843-7030 | 339-8905 |
| Secretary | George Taack | 339-1600 | 321-0319 |
| Treasurer | Carl Schunemann | 352-5801/2736 | 647-4992 |
| Chapters Chairman | Geoffrey Dick | 352-2796 | 678-0979 |

STANDING COMMITTEE CHAIRMEN

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| Sr. Past Chairman | Ben Patz | 275-2816 | 855-3685 |
| Programs | George B. Taack | 339-1600 | 321-0319 |
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| Publications | Al Fowler | 678-2141 | 365-5772 |
| | William Kownacki | 275-2318 | 365-5818 |
| Awards | Joe Massett | 352-3858 | 834-3448 |
| Fla. Eng. Soc. Liaison | | | |
| Prof. Act. Comm. | John Gilbert | 365-2363 | 859-5492 |
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| SOUTHCON | Bruce E. Mathews | 275-2156 | 645-0549 |
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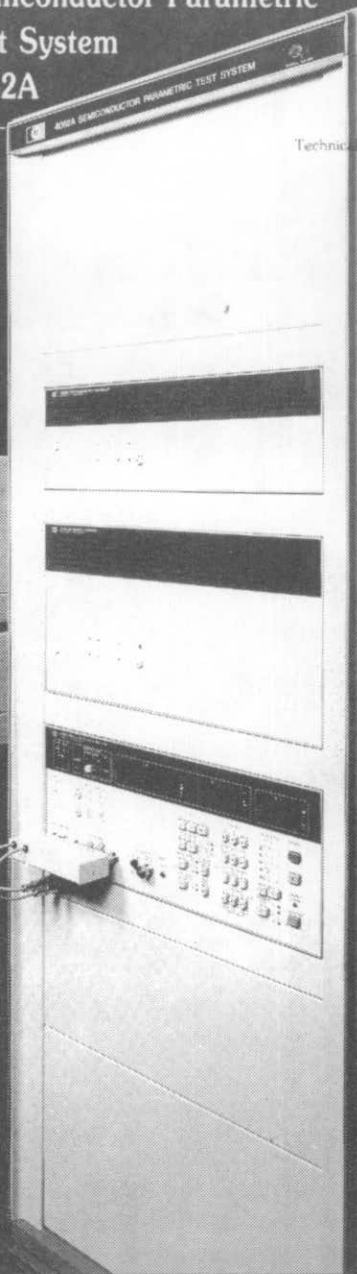
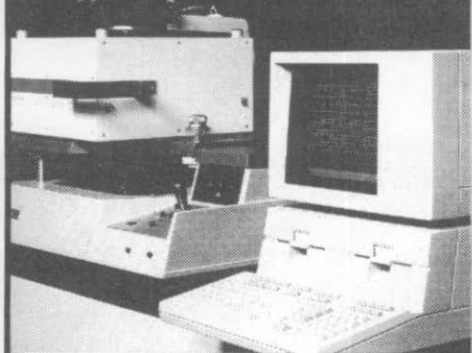
SOCIETY CHAPTER OFFICERS

| | | | | |
|---------------|----------------|-------------------|------------|----------|
| AES | Chmn. | Dave Flinchbaugh | 1-268-7252 | 859-4855 |
| Comm. | Chmn. | | | |
| | V. Chmn. | Walt Wolters | 351-8010 | 855-5945 |
| | Secy. | Mike Oleyar | 339-1600 | 876-3582 |
| Computer | Chmn. | Steve Forsythe | 339-1600 | 830-8853 |
| | Mbr. V. Chmn. | | | |
| Electron Dev. | Chmn. | Ralph M. Mindock | 352-2776 | 862-7764 |
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| AP/MTT | Chmn. | Fred Wilcox | 352-2328 | 857-0098 |
| PE / IA | Chmn. | Mike V. Haddad | 851-3719 | 281-2393 |
| | V. Chmn. | Alvino Gonzalez | 365-6812 | 281-2982 |
| | Secy. | Sally M. Merry | | 629-1901 |

The Executive Committee meets the first Tuesday of each month, except July, at Stromberg-Carlson Training facility, 1044 N. Orlando Ave., Winter Park, FL (Galloway St. side), at 5:30 p.m. All IEEE members are welcome to attend.

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Major Features

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| Capacitance Measurement | Test Frequency: 1MHz C = 0.001pF - 1900nF Basic Accuracy: $\pm 0.5\%$ G = 0.01pS - 12.00mS Basic Accuracy: $\pm 1.5\%$ |
| System Controller | 9836S |
| System Software | Virtual Front Panel Test Instruction Set Utility Library: Sweep Meas., Parameter Meas., Waler Mapping, Histograms, Scatter Plot & Control Charts, Waler Prober Pattern Generator |

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ORLANDO
SECTION
NOTES

VOLUME XIX
NUMBER 5
JANUARY 1984



Mini/Micro Southeast

January 17-19
In Orlando

PUBLISHED BY ORLANDO SECTION
INSTITUTE OF
ELECTRICAL AND ELECTRONIC ENGINEERS

CHAIRMAN'S CORNER

If you recall, the Section Notes for December included a list of senior members and fellows in the Orlando Section. This list contained 138 names, and raises two thoughts:

First, 42 members on this list, or 30%, are life senior members or life fellows. For the benefit of the majority who have never had occasion to acquaint themselves with the term "life", this status is automatically granted retired members when the sum of their age and years of membership equals 100. Member fees are waived upon achieving life status. There are also a number of life members and life associates in the Orlando Section. The large numbers carrying life membership at each grade is to be expected in an area which is attractive for retirement. If some of you who are retired from full-time employment would like to keep in touch with those still in industry, we encourage your participation. Your years of experience represent a wonderful resource, and we would appreciate your active participation in section operation as well as your attendance at our meetings.

Second, there are over 600 in the Orlando Section who are below member grade. Many of these are eligible for upgrading -- associate to member, or member to senior member. There is no added benefit to the section and no identifiable added benefit to the individual who upgrades. On the other hand, it costs no more, and it does add a distinction of sorts. Whether you look at it as equivalent to moving from second chair to first chair in a community orchestra, or earning a PE license when one works in the computer field, it does show that something extra not available to those who treat membership purely as a subscription to IEEE publications. Examine your work experience and if you are eligible for upgrade, I encourage each of you to take that little added effort.

T. E. Ellis

CENTENNIAL COMMITTEE

Most everyone knows that 1984 is our centennial year. Deen Khandelwal is chairman of our centennial committee. If you have ideas on how to celebrate the centennial in Orlando or if you want to help, call Deen on 356-2583 or at home on 277-5959.

Announcing A
ROBOTICS TUTORIAL

Saturday, January 21, 1984

| | | | |
|-------------|---|------------|--|
| 8:00-9:00 | Registration Coffee and Donuts | 12:30-2:00 | Lunch Break |
| 9:00-9:15 | Welcome | 2:00-3:30 | Methods of Robotic Manipulation |
| 9:15-10:45 | Robot Fundamentals Physical Components | 4:00-5:30 | Robot Manipulator Programming Speaker Matthew T. Mason Carnegie-Mellon University |
| 11:00-12:30 | Robot Fundamentals Dynamics and Control Speaker Virginia P. Kobler Ballistic Missile Defense Advanced Technology Center | | |

SPEAKER INFORMATION

Dr. VIRGINIA P. KOBLER

Dr. Kobler is responsible for the Artificial Intelligence program at the Army's Ballistic Defense Advanced Technology Center. She holds a Ph.D. in Industrial and Systems Engineering from the University of Alabama. Dr. Kobler is involved in C³ Battle Management design and development and simulation and modeling of tactical weapons and sensors to determine weapon requirements.

Dr. MATTHEW T. MASON

Dr. Mason is an Assistant Professor at Carnegie-Mellon University, holding a joint appointment with the Computer Science Dept. and Robotics Institute. He received his Ph.D. in 1982 from the MIT Artificial Intelligence Laboratory. In 1983, at the International Symposium of Robotics Research, Dr. Mason received the System Development Foundation Prize for the Best recent doctoral thesis in robotics.

GENERAL INFORMATION

All tutorial sessions will be held in the Engineering Auditorium on the University of Central Florida campus. All registrants will receive a copy of the slides presented in the lectures. Facilities for lunch will be available on campus. For information call or write to:

Ratan K. Guha
 Dept. of Computer Sciences
 University of Central Florida
 Orlando, Florida 32816
 305-275-2341

TUTORIAL ORGANIZERS:

General Co-Chairpersons:

Dr. Ratan K. Guha
 Dr. Brian Petrasko

Others:

Mr. Vince Amico,
 Mr. Russell Theisen,
 Dr. Murali Varanasi,
 IEEECS Orlando Chapter,
 IEEECS Florida West Coast Chapter,
 IEEE Orlando Section,
 UCF and USF IEEECS
 Student Chapters
 UCF ACM Student Chapter

IEEE EXECUTIVE COMMITTEE MEETING ORLANDO SECTION

Date: December 6, 1983

Location: Stromberg-Carlson, 1044 N. Orlando Ave., Winter Park

Attendees:

| | |
|----------------------|----------------------|
| George Taack | Ed Ellis |
| Geoffrey (Jeff) Dick | Steve Forsythe |
| Deen Khandelwal | Ralph M. Mindock |
| Frank Fluet | Ben W. Patz |
| Ernest E. Erickson | Jorge Medina |
| Michael V. Haddad | Al Fowler |
| Russ Theisen | David E. Flinchbaugh |

MINUTES:

1. Meeting was called to order at 5:40 p.m. by Ed Ellis, Chairman. At 6:12 p.m. a quorum was determined to be present.
2. Approval of the November minutes was approved after amendment. Russ Theisen moved the motion. Ben Patz seconded. Motion carried.
3. **Treasurer's Report - Carl Schunemann:**
There was no treasurer's report submitted because the treasurer was out of town.
4. **Programs - George Taack:**

The section meeting was held on November 10, 1983 with Mr. Bruce Bridges and Mr. Elliott Perny representing Sun Bank. Mrs. Pat Nix represented Coral Gables Savings & Loan while Mr. Harold Lanigan and Mr. Jerry Wall represented Variable Investment Plan. The program covered investments for retirement, Keogh, IRA and tax shelters. There were only twelve people in attendance. The speakers presented information that was totally different from the others; however, the information dove tailed together. It was considered a very fine program by the persons who attended.

The Engineer's week banquet is set for Saturday, February 18, 1984. A cash bar and socializing will start at 6:45 PM with the meal starting at 7:30 PM. It will be held at the Errol Estate Country Club in Apopka. The meal will be a buffet consisting of the following:

| | |
|----------------------------|------------------|
| Roast Sirloin of Beef | Buttered Rice |
| Sliced Turkey (White Meat) | Rissole Potatoes |
| Baked Ham | Tossed Salad |
| Shrimp Creole | Cole Slaw |
| Rolls, Bread and Butter | |
| Dessert | |
| Coffee, Tea, or Milk | |

The price will be \$15.00 per person and includes state tax and the gratuity. Tickets will

be on sale by members of the executive committee. It should be noted that this is the banquet that the Fellows and their spouse are guests of the section. If for some reason a ticket can not be purchased from a committee member, reservations will be taken for payment at the door through Wednesday, February 15th.

5. Publications - Al Fowler:

The December Section Notes contained announcements on the Robotics Tutorial sponsored by the IEEE Computer Society Area Activities Board and UCF. The section was to pay for the announcement that appeared on page 9, but the insert should be considered extra. A motion was made by Deen Khandelwal that the Section bill for the cost of inserting and the additional mailing fee (Total of \$47.30). Motion was seconded by Mickey Mindock. Motion passed.

It was noted that all the Martin Marietta telephone numbers will change on December 17, 1983. The office code will change from 352 to 356 while the extension numbers (last 4 digits) will stay the same.

The deadline for the next Section Notes will be December 16th because of the Christmas holidays.

6. Awards - Joe Massett:

Requests for nominations for the Engineer of the Year Award has been printed in the Section Notes. Societies should determine who they will nominate and submit the name and reasons for the nomination in writing to Joe Massett. Criteria governing nomination and selection was also printed in the Notes. Volunteers will be needed to assist Joe in the selection.

7. Intersociety Liaison - Clark Hay

Florida Council of IEEE - Ed Ellis said the next regular winter meeting was to be held in Orlando at 10:00 AM on December 10, 1983. Dave Flinchbaugh was asked to represent the section at the meeting since he was going to attend.

Florida Engineering Society - No Report.

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8. Student Activity - Richard Miller:

It was reported by Ben Patz that the student chapter had to be revived, and the officers are Michael Brig (President), Kim Wallace (Vice President), and Don Vincent (Treasurer). One of their projects is the Engineer's Fair which is coming in the near future.

9. Membership Development - Deen Khandelwal:

There has been six new members join IEEE since the last report with thirteen members moving into the section area. A detail list is attached. The current section membership is 910. The next goal for the section is to reach 1000 members during the centennial year.

Chapters were asked to be sure and use the IEEE meeting report cards to take attendance at meetings. If any information is requested on one of these cards, notify Deen and he will see that the information is supplied.

10. By-Laws - Ernest E. Erickson:

The By-Laws committee met in November and updated the by-laws. It is expected that the by-laws will be ready to submit to the executive committee after the first of the year.

11. SOUTHCON - Bruce E. Mathews:

Bruce Mathews was unable to attend the meeting. It was reported that SOUTHCON will be held in Orlando in January 1984. There has been 700 exhibitors sign up, and an additional 50-60 more are expected to sign up before SOUTHCON starts. There is help needed with registration and transportation during the conference.

Bruce Mathews term is expiring and will be looking for someone else to chair SOUTHCON in the future.

12. Historian - Russell E. Theisen:

The requested data for the centennial coming up next year has sent to Washington.

Russ noted that he had lost the election for 2nd Vice-President of the computer society, however he was appointed 1st Vice-President and is in charge of chapter development world wide.

13. SOUTHEASTCON - Russell E. Theisen:

The SOUTHEASTCON treasurer, Joe Massett, has a check for \$1,986.62 To the treasurer instead of the reported amount of \$2,227.98 for reimbursement of the \$2,500.00 advance money from the Orlando section.

Since councilors for 150 students had asked for their money back because they felt the students had not received their moneys worth, conditions were established and sent out covering student refunds. There has been one refund requested and granted covering ten students. The Florida Council refund has not been returned because they had a specific criteria on who was to receive the funds. The refund of \$750.00 was to be split between the Florida students who attended. The problem is that the head count between the number registered and those attending was considerably different because a large number of students attended but did not register. This has created a problem that has to be solved.

Society Chapter Reports

14. AES - Dave Flinchbaugh:

There will not be a meeting in February as previously reported.

15. Communications - Walt Wolters:

Ed Ellis reported that there was still problems in getting the Communications Society started. Jeff Dick was asked to send a letter similar to the one he used with PES & IA to see if there is anyone interested in getting involved.

16. Computer - Stephen E. Forsythe:

Steve Forsythe reported that George Medina had volunteered to become Vice-Chairman. He also stated that they needed a good meeting place for future meetings.

17. Electron Devices - Ralph M. Mindock:

The meeting held in November had an excellent overview of Ionized Cluster Beam Deposition given by Professor Takagi of Kyoto, Japan. The meeting was co-sponsored by Eaton and had 18 attendees.

The second in a series of meeting being held in cooperation with the Small Business Development Center was held on December 3rd and was attended by approximately 45 persons. The subject was patents and the MIT Enterprise Forum. This meeting probably lost money since they had estimated a break even point of 50 attendees. The Section did not have any financial interest in this meeting.

The next Electron Device Society meeting will be on December 12, 1983 at Carmente's Pizza, and the speaker will be an Electron Devices National Lecturer Professor Lester F. Eastman. His subject will be Advances in Compound Semiconductor Technology and Devices.

The local chapter has helped organize a session for SOUTHCON and Electronic Devices and Materials for Millimeter Wave and Infrared Technology.

Mickey Mindock is to get with the treasurer and finalize the profit on the High Tech Seminar the Section co-sponsored.

18. AP/MTT - Fred Wilcox:

Fred Wilcox was not in attendance. Al Fowler reported that the first technical meeting would be held on March 1, 1984. The speaker will be Steve Adam a MTT National Lecturer. The details will be in the next Section Notes.

It was also reported that a letter has been sent to the chapter members to try to find a way to get more attendance at the meetings.

19. PE/IA - Mike Haddad:

Mike Haddad reported that the next meeting was to be on January 24, 1984 with the subject being Generator Diagnostics. The meeting will be held at the new Westinghouse building at UCF and will also have an exhibit. More information will appear in the Section Notes. Work is continuing on setting up the meeting that is to be held in April.

20. Chapters Chairman - Geoffrey Dick:

Updated meeting calendars were handed out. Corrections and updates for future meetings were made. Copies of future months will be available at the next board meeting.



SOUTHCON '84

REGION'S LARGEST ELECTRONICS SHOW HELD CONCURRENT WITH NEW COMPUTER EVENT

January 17-19

Southcon, the southeastern United States' largest high-technology electronics show and convention, will return to Orlando on January 17-19 with a new companion show—Mini/Micro Southeast.

At Southcon nearly 400 manufacturers, representatives and distributors will exhibit. On display will be a broad range of electronic products which include instrumentation, test equipment, control systems, components, microelectronics, fiber/electro-optics, and production and packaging equipment.

Southcon/84's exhibits and Professional Program will take place in Orlando's beautiful new Orange County Convention-Civic Center. The special events and educational seminars being organized for Southcon/84 will be held in the Sheraton World Hotel.

The featured speaker at the Southcon/84 Keynote Luncheon will be Mr. Robert L. Wendt, president of Sperry Corporation's Electronic Systems Operations.

Preceding the Keynote Luncheon will be two special conferences. The first of these is the Purchasing and Materials Management Conference, to be held opening day, January 17. The conference is jointly sponsored by Southcon, the National Association of Purchasing Management, and the Purchasing Management Association of Central Florida.

The second of Southcon's opening-day conferences will be the Surface Mounted Devices Packaging Conference, which is jointly sponsored by Southcon and the International Electronics Packaging Society.

In 1984 Southcon will feature eight tutorials/short courses. Their topics run the gamut of electronics, computer and time management problems:

- Microcomputer Applications in Industrial Control
- Designing Office Automation Systems
- Evaluation and Selection of 16- and 32-Bit Microprocessors
- Effective Reading
- Computer System Fundamentals & Programming and Interfacing



Mini/Micro Southeast

Designing Effective Industrial Documentation
Time Management for Engineers
Microcomputer Applications for Managers

PROFESSIONAL PROGRAMS

The Professional Programs at Southcon/84 and Mini/Micro are to be presented over the three show days: January 17-19. Southcon's Professional Program boasts 26 separate sessions, or nearly 130 individual presentations, which will cover such diversified topics as "Advances in Custom Integrated Circuit Technology," "Entrepreneurial Assistance," and "Laser Hermetic Sealing of Micro-Electronic Packages."

Mini/Micro Southeast's Professional Program will feature nine separate sessions, which will encompass over 35 individual papers. Mini/Micro's sessions will cover such up-to-the-minute topics as "Faster, Smaller, Cheaper and More Powerful Micro-engines and Microcomputers" and "Developments in Low Cost, High Performance Disk Controllers."

The Southcon Film Theater in 1984 will again feature a slate of technical and general interest films addressing subjects such as the space shuttle program, lasers and robotics.

Mini/Micro Southeast to Debut with Southcon

The Southeast finally has its own computer conference and exhibition in the form of Mini/Micro Southeast-84.

Held concurrently with Southcon/84, Mini/Micro is the only major computer conference which will directly address this region's OEM computer marketplace.

With a projected debut attendance of 5,000 professionals, Mini/Micro will feature a host of American's top manufacturers and suppliers of small computers, data communications systems, peripheral equipment and software.

RECIPROCAL REGISTRATION

Any attendee who registers for either Southcon/84 or Mini/Micro Southeast will be able to attend the other show at no extra charge. This reciprocal registration includes admittance to the Professional Programs, the exhibits and the Film Theater.

FOR VISITOR INFORMATION CALL: 305-645-0143

| JANUARY 1984 | | | | | | |
|---|--------|--|--|--|--------|---|
| SUNDAY | MONDAY | TUESDAY | WEDNESDAY | THURSDAY | FRIDAY | SATURDAY |
| 1 NEW YEARS DAY | 2 | 3 EXECUTIVE COMMITTEE SECTION MEETING 5:30 PM | 4 | 5 | 6 | 7 |
| 8 | 9 | 10 | 11 COMMUNICATION: SOCIETY MEETING | 12 | 13 | 14 |
| 15 NOMINATIONS DUE FOR AWARDS COMMITTEE | 16 | 17 SOUTHCON 84 | 18 SOUTHCON 84 | 19 SOUTHCON 84 | 20 | 21 ROBOTICS TUTORIAL 8AM-5:30PM UCF |
| 22 | 23 | 24 JOINT MTG COMPUTER SOC. PES & IA GROUP MEETING GEN. DIAGNOSTICS | 25 FEDERAL HI-TECH '84 R&D FOR SMALL FIRMS | 26 FEDERAL HI-TECH '84 R&D FOR SMALL FIRMS | 27 | 28 |
| 29 | 30 | 31 | | | | |

HAVE YOU MOVED?

Get your change of address in to IEEE. If you are retired your address may not be correct. Also, when a member dies this will not be reflected in the IEEE records.

RADAR TECHNOLOGY

Thursday, March 15, 8:00 am - 9:30 pm
The Waverly (A Stouffer Hotel), Atlanta, Georgia
DAY AFTER NATIONAL RADAR CONFERENCE
AT SAME LOCATION

This course is geared to those unfamiliar with as well as those experienced with radar design. The lecturer for this well-received course is Dr. Eli Brookner, Consulting Scientist, Raytheon Company, Equipment Division, Wayland, Massachusetts. The course is framed around parts of the book, *Radar Technology*, edited by Dr. Brookner. This book (which sells for \$49) will be given out free to attendees. Also supplied free are paper reprints (valued at \$30) plus supplementary notes of over 700 vignettes updated to 1984 state-of-the-art technology.

REGISTRATION:

Fee: \$125 IEEE Members, \$140 Nonmembers; add \$15 for registration after March 15.

Lunch, Dinner, coffee breaks, course book and notes included (not lodging).

For further information call Dr. Eli Brookner (617)358-2721, X-2366 (Raytheon).

ANTENNA & PROPOGATION/MICROWAVE THEORY & TECHNIQUES SOCIETY

NATIONAL LECTURE FOR 1983/84

Dr. Stephen F. Adam

TITLE: Modern Microwave Measurements

PROGRAM **DATE** 3/1/84 **LOCATION** - To be announced

The use of digital computers have changed/improved Microwave Measurement accuracies and speeds manifold in the late sixties and were applied more broadly during the seventies. On-Board Microprocessors are now being designed into measurement systems providing even more flexibility and accuracy enhancements.

Automatic Spectrum Analyzers do a multituded of sophisticated measurements from simple modulation analysis through phase noise measurements. Network Analyzers also expected to go through further improvements with a number of on board performance enhancements.

A number of measurement techniques will be discussed dealing with power, frequency, noise and scattering parameters.

**POWER ENGINEERING SOCIETY
INDUSTRY APPLICATION SOCIETY
COMPUTER SOCIETY
JOINT MEETING**

**A DEMONSTRATION OF
STEAM TURBINE GENERATOR DIAGNOSTICS
USING ON-LINE ARTIFICIAL INTELLIGENCE**

DATE: January 24, 1984

TIME: 7:30 P.M.

PLACE: Westinghouse Electric Corporation
Steam Turbine Generator Division
Northwest Corner of Alafaya Trail and
University Boulevard (opposite UCF)

RESERVATIONS: Call Mike Haddad - 281-2393 Steve Forsythe - 339-1600
PROGRAM:

The Westinghouse Diagnostic Center monitors operating turbine generators in order to immediately diagnose any developing malfunction. Such early diagnosis of a problem can avoid disastrous failures thus reducing the cost of outage and repair.

At the heart of the diagnostic system is software that is based on artificial intelligence (Expert Systems) and which allows a fast, accurate diagnosis at any time of the day or night with minimum operator interface. It also permits the Diagnostic Center to monitor and diagnose many units simultaneously.

A presentation will be made on how the system operates. It will be followed by a simulation which will indicate how the system performs its diagnostics during a typical generator malfunction.

NOMINATION CALLED FOR ENGINEER OF THE YEAR

As part of the annual Engineer's Week banquet in February 1984 the Orlando Section will select persons for the following awards from nominees submitted by local Groups, Society Chapters, Student Chapters, or Professional Activities Committees. Additionally, those section members desiring to present additional nominees may do so by petitions signed by eight (8) or more Orlando Section members. Student awards shall be submitted by the University of Central Florida Electrical Engineer and Computer Science departments. Awards to be made are as follows:

- Engineer of the Year
- Outstanding Electrical Engineering Graduate Student
- Outstanding Electrical Engineering Senior Student
- Outstanding Chapter Chairman of the Year

Qualifications of Candidate Nominees are:

The nominees must be a current member of the IEEE in good standing and may be any grade from Student through Fellow inclusive. The nominee need not be a member of any Group or Society of IEEE.

Form of Nomination:

The form of the nominations is left to the groups providing the nominations. It is to be emphasized that nominations should be in enough detail that the candidate may be fairly and completely evaluated for the Section award according to the criteria listed below. It is suggested that a minimum concise nomination should consist of a resume, activities list, and a cover letter explaining why he has been chosen for the Chapter nomination. Nominations should be addressed to the Awards Committee Chairman and are due to be received no later than January 15, 1984. The Awards Chairman will be pleased to answer any questions that arise.

Selection Criteria:

The Electrical ENGINEER OF THE YEAR will be selected by the Awards Committee who will evaluate the candidates by the following point system:

1. The quality and quantity of contributions through efforts on Research, Development, Design, Managerial, Educational and other equivalent engineering areas. (70)
2. Contributions to the IEEE. (10)
3. Publications, Patents, and associated activities. (10)
4. Memberships, accomplishments, and responsibilities in other technical and professional groups and activities in various activities of benefit to the community and society in general. (10)

This is the second year we are awarding The Chapter Chairman of the Year. This award will be voted by the Section officers and the Award's Chairman. The award will be based on the number of chapter meetings held in 1983; attendance to those meetings; contributions toward a better chapter; activities to improve the image of the chapter; attendance at Section executive committee meetings; Section committee assignments.

Presentation of Candidates:

Each nominating entity shall present a three minute introduction of their candidates at the banquet.

21. Old Business

Deen Khandelwal has volunteered to chair the Centennial committee.

Work is continuing on the formation of a local chapter in Instrumentation and Measurements and also EMC. I&M wants to hold a conference here April 30 thru May 3, 1985. After much discussion, a motion was made by George Taack to bid for the I&M conference. The motion was seconded by Ernie Erickson. The motion failed by a show of hands.

22. New Business

Tutorial Week East will be held at the Hyatt House on March 19-23, 1984. The following week the National Software Engineering Conference will be held at the same facility.

Ed Ellis reminded every one to read the results of the national elections in the Institute.

Ed Ellis reported that there was a need for engineering experts to act as contacts to the press on items concerning engineering. Dave Flinchbaugh volunteered.

The secretary reminded every one that meeting reports are to be mailed to him within 10 days of a meeting. All reports are due in as soon after January 1 as possible to allow

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the procrastinating secretary the month of January to complete the report that goes to headquarters.

There will be a federal high tech conference on January 26, 1984 in Orlando and the subject will be Small Firms on Federal R&D as part of the SDIR program.

23. Mickey Mindock moved to adjourn. Frank Fluet seconded. Motion carried. Meeting adjourned at 7:15 PM.

24. Next meeting is Tuesday, January 3, 1984, same time and place.

IEEE ORLANDO EXECUTIVE COMMITTEE EXECUTIVE BOARD

| | | Business | Home |
|-------------------|------------------|---------------|----------|
| Chairman | T. E. (Ed) Ellis | 339-1600 | 834-3319 |
| Vice Chairman | Frank Fluett | 843-7030 | 339-8905 |
| Secretary | George Taack | 339-1600 | 321-0319 |
| Treasurer | Carl Schunemann | 356-5801/2736 | 647-4992 |
| Chapters Chairman | Geoffrey Dick | 356-2796 | 678-0979 |

STANDING COMMITTEE CHAIRMEN

| | | | |
|---------------------------|------------------|------------|----------|
| Jr. Past Chairman | Mannie Connell | 1-784-7000 | 273-8588 |
| Sr. Past Chairman | Ben Patz | 275-2816 | 855-3685 |
| Programs | George B. Taack | 339-1600 | 321-0319 |
| Public Relations Chairman | George McClure | 356-3782 | 647-5092 |
| Publications | Al Fowler | 678-2141 | 365-5772 |
| | William Kownacki | 275-2318 | 365-5818 |
| Awards | Joe Massett | 356-3858 | 834-3448 |
| Fla. Eng. Soc. Liaison | | | |
| Prof. Act. Comm. | John Gilbert | 365-2363 | 859-5492 |
| Student Act. Comm. | Richard Miller | 275-2786 | 892-7337 |
| Education | Fred O. Simons | 275-2405 | 678-1796 |
| Membership Develop. | Deen Khandelwal | 356-2583 | 277-5959 |

SPECIAL COMMITTEES

| | | | |
|---------------------|---------------------|-----------|----------|
| By-Laws | Ernest E. Erickson | 275-2310 | 365-5560 |
| SOUTHCON | Bruce E. Mathews | 275-2156 | 645-0549 |
| Advertising Manager | William A. Kownacki | 275-2318 | 365-5818 |
| Historian | Russell E. Theisen | 356-2346- | 671-4139 |
| Member at Large | William C. Cram | | 647-4123 |
| SOUTHEASTCON | Russell E. Theisen | 356-4320- | 671-4139 |

SOCIETY CHAPTER OFFICERS

| | | | |
|---------------|--|------------|----------|
| AES Comm. | Chmn. Dave Flinchbaugh | 1-268-7252 | 859-4855 |
| | Chmn. Walt Wolters | 351-8010 | 855-5945 |
| | Secy. Mike Oleyar | 849-3336 | 876-3582 |
| Computer | Chmn. Steve Forsythe | 339-1600 | 830-8853 |
| | Mbr. V. Chmn. Ralph M. Mindock | 356-2776 | 862-7764 |
| Electron Dev. | Chmn. Donald C. Malocha | 275-2414 | 862-5693 |
| | Mbr. V. Chmn. Dick Zanowick | 356-2914 | 645-0831 |
| | Prog. V. Chmn. Fred Wilcox | 356-2328 | 857-0098 |
| AP/MTT | Chmn. Mike V. Haddad | 851-3719 | 281-2393 |
| PES / IA | Chmn. Alevino Gonzalez | 365-6812 | 281-2982 |
| | V. Chmn. Sally M. Merry | | 629-1901 |
| | Secy. Mike Brigg / Don Vincent / Kim Wallace | | |

The Executive Committee meets the first Tuesday of each month, except July, at Stromberg-Carlson Training facility, 1044 N. Orlando Ave., Winter Park, FL (Galloway St. side), at 5:30 p.m. All IEEE members are welcome to attend.

ORLANDO SECTION
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MAY 1984



PUBLISHED BY ORLANDO SECTION
INSTITUTE OF
ELECTRICAL AND ELECTRONIC ENGINEERS

CHAIRMAN'S CORNER

This month I have only good news to report. Slowly but surely we are seeing increased member participation in section activities - thanks mostly to members new to Central Florida. Deen Khandelwal has a good start on arranging interesting centennial year activities for this fall. Madjid Belkerdid and Mike Oleyar have scheduled the first meeting of the Communications chapter in over a year, and appear to be gathering momentum for a full schedule by fall. It presently appears that by July we will be operating under new by-laws, long needed to provide effective operation consistent with the realities of limited volunteer turnout. Altogether, I believe we can end the 1983-84 program year strong, and that the slate of officers nominated to take office in June is one that can develop an even stronger operation.

I attended the April dinner meeting of the Electron Devices Chapter. The turnout was excellent - about 70. I was seated next to a visitor from N.J., who delayed return home from a business trip to Clearwater, and seated across from two engineers who drove from Melbourne, all because of the speaker and his topic. I doubt if more than 30% of those attending were IEEE members. I am reporting on this to point out two things: (1) any of you who know of a speaker or topic which would interest you enough to attend, let an appropriate member of the executive committee know, as it would likely interest others as well; (2) watch the section notes for meeting announcements, as there are interesting developments, in our field, both in our area and being presented here on activities elsewhere in the country.

Hope to see many of you at our June 23 annual Installation Dinner.

Ed Ellis

NOTICE TO MEMBERS

If you have changed your address remember to submit the change to IEEE Headquarters. Otherwise your mail will be delayed. We get our mailing labels from headquarters. Also Post Office will only transfer mail for 1 year.

SALARY SURVEY REPORT

IEEE Salary and Fringe Benefit Survey for 1983 has been released by Headquarters. If you are interested Deen Khandelwal has a copy. (356-2583) After circulating it will be placed in Orlando Public Library.

MEMBERSHIP DIRECTORY

The 1984 IEEE Membership Directory is now published. Price is \$35/each to IEEE members. Order from IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. Check should be payable to IEEE. \$2 billing charge added for non-prepaid orders.

IEEE EXECUTIVE COMMITTEE MEETING

Meeting was held on April 3, 1984. Minutes of meeting not available for publication at press time so will be carried in June issue.

IEEE CENTENNIAL NEWS

Members of the IEEE Centennial Activities Committee of the Orlando Section earnestly request your suggestions for and participation in the Centennial activities at the local level.

The Committee members and their telephone numbers are:

| | |
|----------------------------------|-------------------------|
| Dr. Deen D. Khandelwal, Chairman | 356-2583 - 277-5959 (H) |
| Dr. Dave Flinchbaugh | 268-7252 - 859-4885 (H) |
| John Gilbert | 356-2363 - 859-5492 (H) |
| George McClure | 356-3782 - 647-5092 (H) |
| Russ Theisen | 356-4320 - 671-4139 (H) |

Some of the accomplishments and planned activities are as follows:

- Letters were written to all life members of IEEE in the Orlando section for a variety of contributions from them and for their active participation in planning and executing Centennial activities of interest to them. In response to that, several members have, a) submitted professional historic write-ups for possible publication, b) identified items for exhibition on "A Century of Electrical Progress", c) attended a planning meeting on March 14, etc. Another meeting of the life members has been scheduled for May 12, 1984 at 2:00 pm at Kane Furniture meeting room on East Colonial.

- Orlando section has appropriated funds for Centennial celebrations and October is declared to be the Centennial month for Orlando Sections. Efforts are under way for having Governor Graham declare October as the IEEE Centennial Month in the State of Florida. Details of the specific activities for the month will be forthcoming. Your ideas are invited.

- Special issue of Orlando Section Notes is scheduled for the month of September 1984. Please submit your ideas and inputs to our editor Al Fowler.

- Arrangements have been made to place a complete set of IEEE Standards in the Orlando Public Library for the public's use. The formal placing is being planned for the month of October.

- Attempts are being made to approach local companies to actively participate in the IEEE Centennial celebrations. You are requested to approach your company for this purpose. For further information please contact Dr. Deen Khandelwal.

- Samples of IEEE Centennial mementos are available for your inspection before ordering with Dr. Khandelwal.

- A set of IEEE historical slides prepared by the Centennial Committee at the headquarters will be available in Orlando starting May 1, 1984. You can preview these slides at the next executive committee meeting on May 1, 1984 at Stromberg-Carlson Training Center.

- Martin Marietta has agreed to subsidize placing of the IEEE Standards in the Orlando Public Library.

- IEEE is also planning to place the following books in the Orlando Public Library for your use:

1. Engineers and Electrons by Fink and Ryder
2. The Making of a Profession: A Century of Electrical Engineering in America
3. IEEE Standard Dictionary of Electrical and Electronics Terms.
4. IEEE U.S. Membership Salary and Fringe Benefit Survey, 1983.

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HIGHLIGHTS FROM THE ELECTRICAL ENGINEERING HISTORY OF THE I. E. E. E.

The last quarter of the nineteenth century was marked by a tremendous growth in electrical technology. By the early 1880's, the United States was crisscrossed by telegraph wires, and Europe and America were connected by underwater cable. Arc lights were in use in several cities. Thomas Edison's Pearl Street Station was supplying power for incandescent lighting, there were numerous firms manufacturing electrical equipment, and the telephone was growing in importance as a communications tool. This burgeoning electrical activity prompted the Franklin Institute to sponsor an International Electrical Exhibition at Philadelphia in 1884. This exhibition in turn proved to be the catalyst which resulted in the formation of the American Institute of Electrical Engineers—the original ancestor of today's Institute of Electrical and Electronics Engineers.

The first general meeting of the AIEE was held on May 15, 1884. The proposed organizational rules were adopted and officers were elected. Norwin Green was the first President. Vice Presidents included Alexander Graham Bell and Thomas A. Edison.

The AIEE held its first technical session on October 7-8, 1884, at the Franklin Institute during the Exhibition. The papers presented there were published in the initial volume of Transactions of the AIEE, issued in 1884. The first paper, "Notes on Phenomena in Incandescent Lamps" by E.J. Houston, was a discussion of the Edison Effect, the phenomenon which became the foundation of electronics.

The Institute of Radio Engineers (IRE) grew out of the merger of two earlier organizations. The Society of Wireless Telegraph Engineers (SWTE) was begun in 1907 in Boston by John Stone. The Wireless Institute (TWI) was formed in 1909 by Robert Marriott.

In an attempt to salvage one strong society, the two societies merged in 1912. The first official meeting of the new IRE was held in May 1912. A constitution was approved and officers elected.

The two societies grew and prospered side by side, sometimes overlapping, but maintaining largely separate identities and interests. The AIEE came to be oriented towards the electric utilities and industrial users of power, while the IRE became the electronics society.

The years after World War II brought drastic changes to these long-standing arrangements. Electrical technology was moving rapidly; radar, computers, television, solid-state electronics, and space exploration were burgeoning fields. These were largely electronic technologies; thus electronics became the glamour field, attracting the majority of electrical engineering students and offering the majority of new electrical engineering jobs. This translated into an increase in membership in the IRE.

Justifiably alarmed by this trend, the AIEE in 1957 appointed a task force to devise a plan for dealing with the situation. The task force, headed by W.A. Lewis, who was also a member of the IRE, issued its report in 1959. It found that 1) the AIEE had failed to enter new fields as they opened up; 2) the Institute had insufficient appeal to college students; and 3) the board and committee structure did not adequately cover the whole field of electrical engineering. The task force's recommendations included revising the Technical Committee structure to resemble that of the IRE's Professional Groups. The recommendations were not put into effect, however, because the movement toward merger with the IRE had begun in earnest.

Merger was an old idea. Alfred N. Goldsmith, one of the founders of the IRE, had long

advocated the joining of the two electrical engineering societies. In 1922 Goldsmith and A.E. Kennelly, then a past president of both societies, initiated a serious effort toward merger which failed due to the AIEE's lack of interest in radio. After World War II, the AIEE became more receptive to the idea of consolidation. In 1945, 1952, and 1956 the AIEE Board of Directors expressed its interest in merging with the IRE, but the radio engineers chose to remain aloof.

Yet merger was becoming ever more logical. Neither society adequately represented the whole breadth of electrical engineering. There was duplication of staff, publications, and activities, as well as duplication of expenses for members who chose to join both institutes. The difficulties were first overcome on college campuses, where Student Branches of the AIEE and the IRE began to join together. In 1940 the Boards of both societies authorized the creation of Joint Student Branches, with one set of dues.

On the national level efforts at closer cooperation continued. In 1956 John D. Ryder and Morris Hooven, Presidents of the IRE and AIEE respectively, met at the Engineers Club in New York and worked out a reciprocal membership plan, whereby members of one institute could join the other at an equivalent grade, without payment of fees or further substantiating documents. The plan was approved by the IRE in 1955, but the AIEE did not approve until sometime later. In 1958 AIEE President L.F. Hickernell and IRE President D.G. Fink worked out additional arrangements for closer cooperation, but these were not immediately implemented.

In January of 1961, IRE past President Ronald McFarlan was invited to attend an AIEE board meeting, where he described the organization and philosophy of his institute. Later in the year, Clarence Linder, President of the AIEE made a similar appearance before the board of the IRE. After these meetings events moved rapidly. Representatives of the two societies met and arranged for the appointment of a joint Ad hoc Committee to discuss the specifics of a merger. The eight-man committee did its work well; by October of 1961 the IRE board authorized its President, P.E. Haggerty, to present the AIEE with a resolution that the merger go forward.

The Merger Committee was enlarged to fourteen members in 1962 and set out to devise merger recommendations which could be presented to the membership of both societies later in the year. In the election that followed, 87 percent of the voting members of each society approved the merger. Donald G. Fink, a Fellow of both the AIEE and the IRE, was chosen as General Manager of the new Institute of Electrical and Electronics Engineers. On January 1, 1963 the IEEE was officially born.

In 1964 Spectrum was launched as the new "core" publication, with Proceedings remaining as a high quality technical journal available by separate subscription.

In 1973 the IEEE took a step away from the traditions of both of its predecessors with the adoption of a new constitution. The IEEE gave up its role as a "learned society" concerned solely with the advancement and dissemination of knowledge, and assumed to role of a "professional society" concerned with the non-technical as well as technical interests of its members. The United States Activities Board, supported by an annual assessment paid by U.S. residents, was created to oversee the non-technical operations of the IEEE within the United States.

Two decades have passed since the formation of the IEEE. Today the Institute is the largest professional association in the world, with the almost a quarter-million members, and its activities now extend far beyond anything its forebears could have foreseen. It remains, however, just as it was a century ago, the premier spokesman for the most significant and exciting technological field of its time.

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MEMBERSHIP INCENTIVE PROGRAM

Designed to reward Societies for recruiting **new IEEE** members and Sections for recruiting **new Society** members, the program does have some stipulations listed below. A booklet with all the stipulations and the necessary tracking codes is being sent to those concerned.

1. Societies will receive \$5.00 for each new Institute membership (excluding students) received by IEEE with payment. The application must have a Field Services tracking code that identifies the Society as the recruiting source. Our tracking code number is 030551.

2. Sections will receive \$5.00 for each, first time Society membership (excluding Students and Society Affiliates) received by IEEE with payment. The application must have a Field Services tracking code that identifies the Section as the recruiting source.

3. Only one tracking code will be accepted on each application form. If more than one code appears on an application form, no incentive will be paid.

4. The tracking codes are for general recruiting. They should be inserted in space provided on the application forms.

5. For tracking codes identifying special recruitment programs that also generate an incentive payment (i.e. direct mailing campaigns, advertisements, promotions at conferences), please contact Membership Development.

6. This program is not retroactive. Applications received without tracking codes anytime during 1984 will not be included for incentive payments.

7. Payments of incentive funds will be based on year-end statistics indicating the number of qualifying memberships received by the Service Center during the tracked year. The first payments will occur in 1985.

IEEE COMPUTER SOCIETY MEETING

May 8, 1984

Dr. Lawrence T. Wos of Argonne Nat'l. Laboratory will speak on Automated Reasoning. Dr. Wos has extensive experience in the areas of formal logic, automated theorem proving and automated reasoning. He is principal author of **Automated Reasoning: Introduction and Applications**, published by Prentice-Hall early this year.

Automated reasoning and its implementation language, PROLOG, provide an alternative to traditional procedural programming languages. Instead of specifying a program as a series of procedures to be performed sequentially, a logic program describes a problem in terms of logical implications that must hold among the various pieces of the problem. Many real-world problems can be better formulated and solved by an automated reasoning approach than by the procedural approach. Examples of domains in which automated reasoning has proved successful are:

- design and validation of logic circuits;
- database query systems;
- synthesizing organic compounds;
- robot control;
- automated theorem proving.

Dr. Wos's lecture will not assume any background in the automated reasoning field. He will discuss automated reasoning in general as well as specific programs that apply automated reasoning to the above mentioned functions.

Meeting Location: Science Applications, Inc.
3191 Maguire Blvd., Suite 100
Orlando, Fla. (across from Fashion Square Mall)

Meeting time: 7:00 PM on May 8, 1984

The public and IEEE members are invited. Please contact Steve Forsythe (work: 339-1600, home: 830-8853) for reservations or more information.

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| MAY 1984 | | | | | | |
|-----------------------|-----------------------------------|--|---|---|--------|--|
| SUNDAY | MONDAY | TUESDAY | WEDNESDAY | THURSDAY | FRIDAY | SATURDAY |
| | | 1 EXECUTIVE COMMITTEE MEETING 5:30 PM | 2 | 3 ELECTRON DEVICES SPKR: G. BOSMAN SUPER LATTICE STRUCTURES CARMENTES PIZZA 6 PM ORG. BLSM TRAIL | 4 | 5 |
| 6 | 7 | 8 COMPUTER SOCIETY SPKR: DR. L. WOS AUTOMATED REASONING 7:00 PM | 9 | 10 | 11 | 12 LIFE MEMBER ACTIVITIES PLANNING MEETING |
| 13 MOTHER'S DAY | 14 | 15 | 16 ELECTIONS COMMUNICATIONS SOCIETY UCF SPKR: M. BELKERDID MODULATION TECHNIQUES SPREAD SPECTRUM 7:30 PM | 17 | 18 | 19 ARMED FORCES DAY |
| 20 | 21 | 22 AES MEETING NATIONAL SPEAKER | 23 | 24 | 25 | 26 |
| 27 | 28 MEMORIAL DAY OBSERVED | 29 | 30 MEMORIAL DAY | 31 | | |

THE CENTENNIAL SLIDE/TAPE PRESENTATION

A 100 years of EE history has been condensed into a 33 minute long slide/tape presentation by the Center For The History of Electrical Engineering called "A Century of Electricals."

You can request a copy by writing Field Services. Please specify a first and second choice of show dates and whether you need a tape with audible or inaudible slide cues. The package should arrive a week before your show date. Please return it within 5 days after the presentation. The number of copies are limited, so efficient distribution is essential to maximize viewership.

Momentos of IEEE CENTENNIAL YEAR may be ordered from IEEE. These include Key Tag, Woman's Scarf, Ties, Centennial Mug, Pens, Posters and a host of other items. Dean Khandelwal (356-2583) has details and order blanks.

1984 International IEEE/AP-S Symposium National Radio Science Meeting at the Western Hotel Copley Place, Boston.

AP/MTT-S Benjamin Franklin Symposium on Advances in Antenna and Microwave Technology at Philadelphia, May 5, 1984.

INSTALLATION BANQUET

The Installation Banquet has been set for Saturday, June 23, 1984. It will be held at the Langford Hotel in Winter Park. There will be a cash bar before the banquet which will have Prime Rib as the meal. The cost will be \$15.00 a person. A request has been made to the Astronaut Office at the Johnson Space Center for a mission specialist who has flown in space to be the speaker. The topic suggested was to discuss current engineering in space, and what may be expected on the space station that has been proposed.

CASH BAR STARTS AT 6:45 PM AND BANQUET AT 7:30 PM.

ANTENNAS & PROPOGATION/MICROWAVE THEORY AND TECHNIQUES SOCIETY AP/MTT

No meeting scheduled for May, however we are attempting to schedule Prof. Ben Monk from Ohio State University. Prof. Monk is national lecturer for A.P. and is a specialist in antennas particularly very low cross section designs.

MEETING NOTICE COMMUNICATIONS SOCIETY

TOPIC: Optimum Modulation Technique for Spread Spectrum

SPEAKER: Madjid A. Belkerdid, UCF Faculty

WHERE: Conference Room
United Technologies/Lexar Corporation
1030 North Orlando Avenue (Suite P)
Winter Park, Florida

DATE: Wednesday, May 16, 1984

TIME: 7:30 PM Society business
8:30 PM Technical presentation

PROGRAM: Society business: Election of officers

Technical: Madjid Belkerdid will describe a new modulation technique for spread spectrum with probabilities of error comparable to OPSK and MSK. Intersymbol interference is non-existent. Side lobe levels are -60 dB down. Implementation relies on SAW devices.

NOTE: The meeting place is in an office building on the East side of 17-92 located at the intersection of this highway and Lee Road. Parking space is available at the entrance facing Friends Avenue, parallel to and immediately North of Lee Road.

**IEEE ORLANDO EXECUTIVE COMMITTEE
EXECUTIVE BOARD**

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| Fla. Eng. Soc. Liaison | | | |
| Prof. Act. Comm. | John Gilbert | 365-2363 | 859-5492 |
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SOCIETY CHAPTER OFFICERS

| | | | | |
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| AES | Chmn. | Dave Flinchbaugh | 1-268-7252 | 859-4855 |
| Comm. | Chmn. | | | |
| | V. Chmn. | Walt Wolters | 351-8010 | 855-5945 |
| | Secy. | Mike Oleyar | 849-3336 | 876-3582 |
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| Electron Dev. | Chmn. | Ralph M. Mindock | 356-2776 | 862-7764 |
| | Mbr. V. Chmn. | Donald C. Malocha | 275-2414 | 862-5693 |
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| Industry | V. Chmn. | Avelino Gonzalez | 281-2982 | 365-6812 |
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| Student Chapter | Chmn. | Mike Brig | | 277-1396 |
| Officers | V. Chmn. | Kim Wallace | | 677-4213 |
| | Treas. | Don Vincent | | 678-4603 |

The Executive Committee meets the first Tuesday of each month, except July, at Stromberg-Carlson Training facility, 1044 N. Orlando Ave., Winter Park, FL (Galloway St. side), at 5:30 p.m. All IEEE members are welcome to attend.

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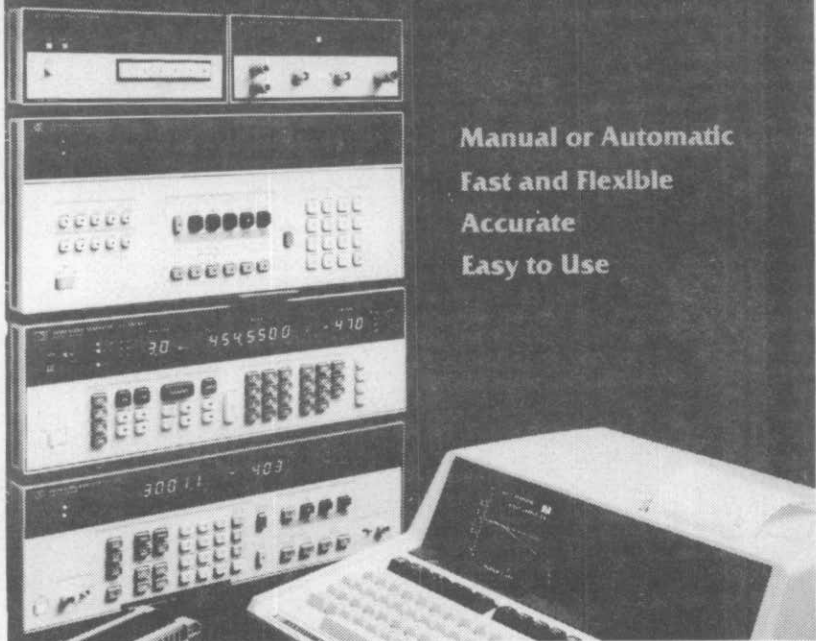
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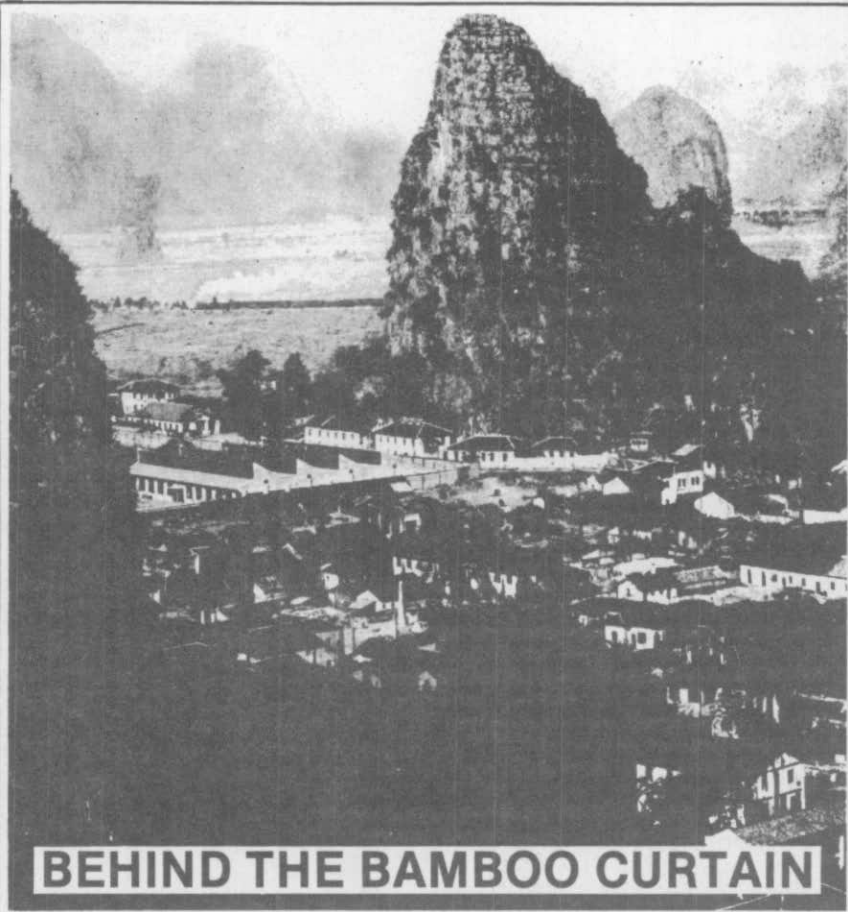
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A CENTURY OF ELECTRICAL PROGRESS

VOLUME XIX
NUMBER 10
JUNE 1984



BEHIND THE BAMBOO CURTAIN

PUBLISHED BY ORLANDO SECTION
INSTITUTE OF
ELECTRICAL AND ELECTRONIC ENGINEERS

CHAIRMAN'S CORNER

Happy Birthday to us. On May 13th the Orlando Section was 25 years old. And what do we have to show for our 25 years.....I believe we are a strong section, with good participation by the chapters. When compared to other sections in the state, we are among the healthy. When compared to what we could be, we may be a bit shy. As with any organization entertaining as wide a spectrum of disciplines as exist in the EE field, it is a chore achieving widespread member participation; family and recreational activities take precedence over professional activities, especially those outside our normal area of specialization. Our goal for the next 25 years should be growth - not in membership, but in member participation. How? Each member that feels the local section of IEEE does nothing to support their needs and interests, should contact chapter or section representatives and identify their area of interest - or perhaps more to the point, be willing to arrange for a presentation.

Thank you, all members of the 1983-84 executive committee. By the time the next issue of the section notes is published, there will be a new section chairman. I have enjoyed working with you, and look forward to working with next years chairman as needed.

FACULTY OPPORTUNITY

ELECTRICAL AND COMPUTER ENGINEERING FACULTY POSITIONS AT FLORIDA INSTITUTE OF TECHNOLOGY BEGINNING SEPTEMBER, 1984. THE DEPARTMENT OFFERS COURSES OF STUDY LEADING TO B.S., M.S. AND PH.D. INDIVIDUALS APPLYING SHOULD HAVE TEACHING AND RESEARCH CAPABILITIES IN ONE OR MORE OF THE FOLLOWING AREAS: DIGITAL SYSTEM DESIGN, FAULT TOLERANT COMPUTING, DISTRIBUTED COMPUTING SYSTEMS, COMPUTER ARCHITECTURE, CONTROL AND COMMUNICATION SYSTEMS, SIGNAL PROCESSING AND ROBOTICS. THE ELECTRICAL AND COMPUTER ENGINEERING CURRICULA ARE ABET ACCREDITED. RANK AND SALARY DEPENDENT UPON QUALIFICATIONS. AN EARNED DOCTORATE IN ELECTRICAL OR COMPUTER ENGINEERING AND A COMMITMENT TO TEACHING, SPONSORED RESEARCH, AND SERVICE ARE REQUIRED. BENEFITS INCLUDE: DEPENDENT TUITION, AND IMMEDIATELY VESTED, PROBABLE PENSION. SEND RESUME, VISIT OR CALL DR. JOHN HADJIOLOGIU, PROFESSOR AND DEPARTMENT HEAD, ELECTRICAL AND COMPUTER ENGINEERING, FLORIDA INSTITUTE OF TECHNOLOGY, MELBOURNE, FLORIDA 32901, 305-723-3701 (Ext. 331). AN EQUAL OPPORTUNITY AFFIRMATIVE ACTION EMPLOYER.

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| | 1-2 Insertions | 3-10 |
|----------|----------------|------|
| 1/4 page | \$30 | \$25 |
| 1/3 page | 40 | 35 |
| 1/2 page | 50 | 45 |
| 2/3 page | 57 | 52 |
| 3/4 page | 65 | 60 |
| 1 page | 75 | 70 |

INSTALLATION BANQUET

DATE: SATURDAY, JUNE 23, 1984

PLACE: Langford Hotel
Winter Park

TIME: Cash Bar & Socializing 6:45 p.m.
Dinner 7:30 p.m.

PROGRAM: Installation of Officers
and
"A Fresh Look at Behind the Bamboo Curtain"
by Bob Duggan and assisted by his wife Kathleen

COST: \$15.00

MEAL: Prime Rib, baked potato, carrots, tossed green salad and dessert

(If reservations are received by Tuesday June 19, it may be possible to substitute a seafood entree for the prime rib.)

Bob Duggan is employed by Lockheed-Georgia and currently is Region 3 Vice Chairman. The program is a composite of his two trips to China as a member of a microwave exchange team with the last trip occurring in 1983. The talk will contain cultural, technical, and ecological comments and will be supplemented by slides taken during the trips. Kathleen will make comments from a woman's view point. This program has been presented to other sections in Region 3 and has received good reviews.

Reservations: Please call reservations in by June 21 to 339-1600

George Taack Ext 200

Ed Ellis Ext 203

NOTE: Due to the cost involved, a reservation will constitute the same as a ticket sale. The person making the reservation will be responsible to pay for the event unless the commitment is withdrawn prior to the Section providing the guarantee count on June 21.

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CENTENNIAL WRITEUPS

You are invited to submit writeups which would be of historical interest, for including in the Centennial souvenir issue of Orlando Section Notes. Writeups should not be more than 1000 words. Some of the suggested topics are:

- History of Orlando Section
- History of --- Chapter of Orlando Section
- Walt Disney World's contribution to Electronics
- Orlando's contribution to the technology & profession
- Who is who in the Orlando Section
- Orlando, the laser capital of the world — survey of various Laser companies
- _____, employer of maximum number of IEEE members in Orlando area.

DID YOU KNOW?

1. 'Electron' is the Greek word for amber which was originally used by the Greek philosophers to demonstrate static electricity.
2. The word electricity was coined by William Gilbert.
3. IEEE is the largest professional society in the world.
4. The founders of the parent organizations of IEEE are Nathaniel Shepard Kieth (American Institute of Electrical Engineers 1884), John Stone (Society of Wireless Telegraph Engineers, 1907) and Robert Henry Marriott (The Wireless Institute, 1909).
5. The concept of IRA's originated in the Orlando Section of IEEE.
6. Thomas Edison obtained 1093 patents.

In the spirit of the celebration of the centennial of our institute, please submit your entries for this column. If 5 or more of your entries are accepted, you will receive a gift from the Section. Submit entries to Deen Khandelwal.

| JUNE 1984 | | | | | | |
|-----------------|--------|--|-----------|----------------|--------|---|
| SUNDAY | MONDAY | TUESDAY | WEDNESDAY | THURSDAY | FRIDAY | SATURDAY |
| | | | | | 1 | 2 |
| 3 | 4 | 5 EXECUTIVE COMMITTEE SECTION MEETING 5:30 PM STROMBERG ANEX: | 6 | 7 | 8 | 9 |
| 10 | 11 | 12 AES MTG. DR. R. JOHNSON INDUSTRIALIZATION OF SPACE YORK STEAK HOUSE FASHION SQ. 6:30PM | 13 | 14 FLAG DAY | 15 | 16 |
| 17 | 18 | UCF VIDEO CONF. PERSONAL COMPUTER SOFTWARE 11 AM to 4 PM | 19 | 20 | 21 | 22 |
| FATHER'S DAY | | | | | | 23 INITIATION BANQUET BAMBOO CURTAIN LANGFORD HOTEL 6:45PM |
| 24 | 25 | 26 | 27 | 28 | 29 | 30 |

ANNOUNCEMENT

The next issue of the Section Notes will be a special centennial issue to be published in September or October. We will look upon this issue as something of historical significance. Please send your special inputs to the editor Al Fowler, 3001 Aloma Ave., Winter Park, FL 32792.

**CALL FOR PAPERS FOR THE ANNUAL
TECHNICAL MEETING OF THE ELECTRON
DEVICES SOCIETY TO BE HELD IN
SAN FRANCISCO DECEMBER 9-12, 1984.**

Deadline for abstracts is July 23, 1984.

**Contact Hank Geipel, Dept. G35 Bldg. 967-1
IBM Corp., River Road, Essex Junction, VT 05452**

WHY SHOULD ONE BECOME A SENIOR MEMBER?

Personal letters were written to several IEEE members of the Orlando section to consider becoming Senior Members of the Institute. The advantages of becoming a senior member were enumerated to include:

1. It is an eligibility requirement for nomination for Institute Fellow.
2. Your personal pride at no extra cost.
3. Reflection of your professional activities and responsibilities on your colleagues.
4. Your being a part of a superior professional bank of your chapter and section.

To date, the affirmative response has been about 7%. As the membership development committee chairman, I am rather surprised at this low response. I therefore, decided to bring another point to your attention.

I recently reviewed the 1983 IEEE U. S. Membership Salary and Fringe Benefit Survey published by IEEE. (Arrangements can be made for you to personally look at this report.) There I noticed that with accumulating experience, the salaries of both the members and fellows went down after some time but that of Senior Members kept on increasing. Now, would it not make sense to be counted in the more desirable group at no additional cost? I, therefore, would like to request that those of you who have over 5 years of experience, seriously consider applying for Senior Membership.

D.D. Khandelwal

Chairman

Membership Development Committee

IEEE Orlando Section

LIFE MEMBERS!

We would like one or some of you to take up a project of putting together a directory (one full page biography in a standard format to be designed) of all life members in the Orlando section.

LIFE MEMBERS! OTHER MEMBERS!

Would you like to participate in compiling a list of those electrical and electronics engineers (and their contributions) who change our life style today. The names would include Thomas Edison (light bulb etc.), Alexander Graham Bell (telephone), Marconi (radio), Scleokley, Bardeen & Brattain (transistor), Jack Kilby (integrated circuits) etc. Once this information is compiled, its uses (publicatins) will be unlimited. We can also prepare a list of those engineers who played a role behind the scene, as far as general public is concerned but who are very much on our tongues. These names would include Maxwell, Steinmetz, Faraday, Tesla, Ohm, Hertz, Terman, Everitt, Ryder, etc. Please contact Dr. Khandelwal for coordination and for further details.

IMPACT

The latest issue of Impact (May '84) has some excellent articles on the National Crisis in Pre-college science and math education - must reading for all engineers interested in our national survival and well being.

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MAY 1 EXECUTIVE COMMITTEE MEETING

One major decision reached at the May 1 Executive Committee meeting was that we should only publish a synopsis of each meeting. All members of the executive committee will continue to receive complete minutes by separate distribution, and copies will be made available to other section members upon request addressed to the secretary.

Our advertising rates have not been sufficient to cover incremental costs for the space, in all cases. It was decided to raise rates. The new rates are to be published in this issue.

We have three members of the Orlando section who have received IEEE centennial medals of which we were not previously aware. Each was awarded by an entity of the IEEE other than the Orlando Section. Watch for details as we learn them.

The Orlando Section plans to nominate candidates for the Region 3 Vice Chairman position and Region 3 Outstanding Engineer Award.

The Education Committee Chairman, Dr. Simons, offered a proposal, accepted by the executive committee, that the section and UCF Co-sponsor local participation in the IEEE video conference short courses. UCF will handle publicity, advertising and facilities arrangements. They will also handle all financial arrangements and assume financial responsibility. The initial course to be offered under this arrangement is the satellite broadcast on PC software applications to be offered June 12, and further described elsewhere in this issue of the Section Notes.

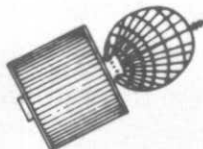
E. Ellis
5/24/84

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SPEAKERS' BUREAU BEING ORGANIZED

The Orlando Section is organizing a Speakers' Bureau composed of section members willing to speak to local school, civic, or church groups about some aspect of electrical engineering or the engineering profession. Talks may be devoted to general technology issues, such as how the nation will meet its future needs for energy; to interpretation of technology news, such as the role of the space shuttle in proving the feasibility of future space manufacturing activities; to company-related events, such as the cellular radio testbed Stromberg-Carlson will operate under its venture with Mitsubishi; to engineering history, to the many uses of the personal computer in making the citizen more productive, or to any of many engineering-related topics of interest to you.

The local school systems have been contacted and would welcome speakers to their career-day seminars or science club meetings who can represent electrical engineering. Civic clubs frequently have luncheon meetings and welcome speakers who have a 20-minute topic to share. Church groups have mid-week dinners and are interested in talks on where technology is taking us.

The talks may be tailored to materials that already exist in your company, perhaps descriptions of products of services you provide or to materials available through the Section (the Energy slide show or the Centennial history slide show), or they may be something of interest to you on which you have done some study, such as robotics.

George McClure is preparing a list of those willing to speak and the topics they prefer to speak on. Call him at 356-3782 weekdays or 647-5092 evenings to discuss further your special interests or the groups you are willing to talk to. Part of the reason there has been no television show called Marcus Welby, EE, is that the public does not encounter electrical engineers in the course of their daily lives, and do not understand how engineering directly affects them and improves their lives. Many students at the high school level considering engineering or science careers have never talked to an engineer or scientist. The Speakers' Bureau is an effort to correct that, and to provide visibility for the work we all perform from which the public benefits.

IEEE HISTORY CASSETTE AND SLIDES

A carousel of 35mm slides and a 33 minute cassette tape has been prepared by IEEE depicting the origins of our organization, its pioneers and some of their landmark contributions to progress. The title is "A CENTURY OF ELECTRICALS".

We have screened it locally and enjoyed the selection of individuals and events highlighted. The Orlando section is having a copy made for use by our members.

If you would like to use the package, a projector and cassette player with automatic cueing are also available by contacting our section secretary.

INTERNATIONAL CONFERENCE on CONSUMER ELECTRONICS is June 6-8 at the Westin Hotel, Rosemont, Illinois.

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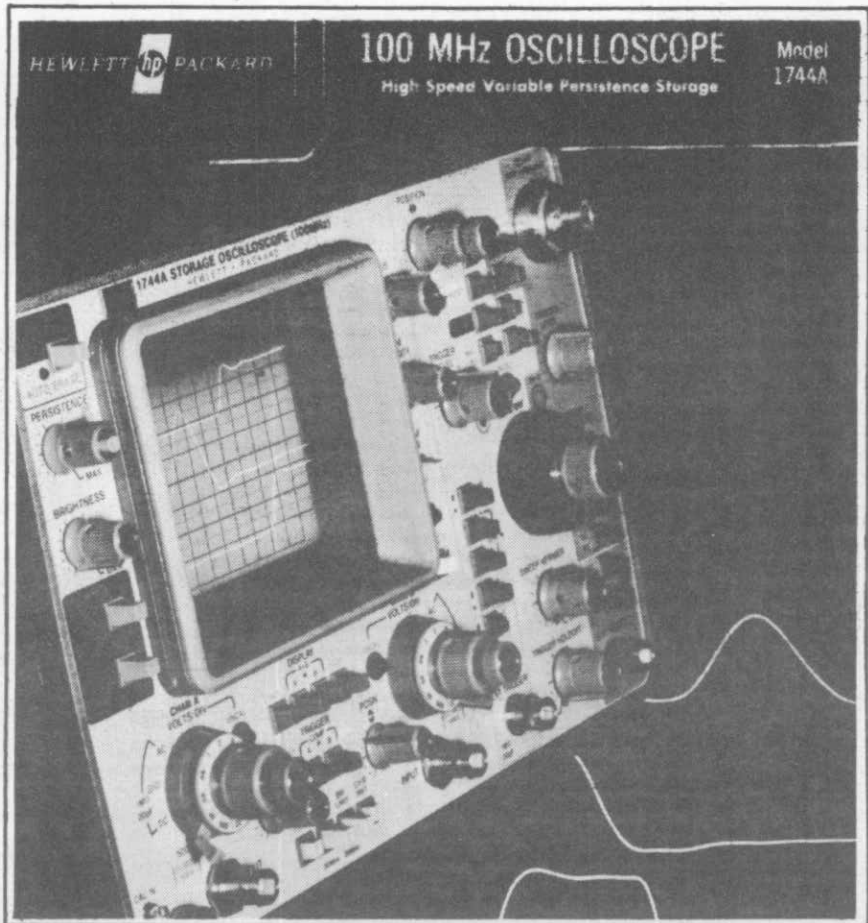
The Executive Committee meets the first Tuesday of each month, except July, at Stromberg-Carlson Training facility, 1044 N. Orlando Ave., Winter Park, FL (Galloway St. side), at 5:30 p.m. All IEEE members are welcome to attend.

*New budgets by end of June
Final budget by end of September*

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