



MEETING ANNOUNCEMENTS

Unless otherwise stated, non-IEEE members are welcome to attend the meetings listed here.

Members are encouraged to invite and bring guests to these events.

ANTENNAS AND PROPAGATION MICROWAVE THEORY AND TECHNIQUES (AP/MTT)

GaAs MIMICS and Applications

Date: Thursday, January 16, 1992
Time & Place: Refreshments at 5:30 P.M., Meeting at 6:00 PM, Hewlett Packard, Dinner at Outback Steakhouse (Florida Mall) after meeting.
Contacts: Jeff Rollman (356-6310)

High Temperature Superconductors

Date: Thursday, February 20, 1992

Spacecraft and Aircraft Antennas

Date: Thursday, March 19, 1992

COMMUNICATIONS/VEHICULAR TECHNOLOGY (COM/VT)

Intelligent Networks for Telecommunications

Speaker: Bob Eastwood, Siemens Stromberg-Carlson Corp.
Abstract: The telecommunications network of the late 1990's will offer services well beyond the capabilities of present day networks, by using service logic execution controls external to the local switching environment. Mr. Eastwood and a team at Siemens Stromberg-Carlson, is at the forefront in their developments, working now on a 1993 introductory application of these techniques, preparatory to introduction for wide application perhaps as early as 1995.

Time & Date: 7:00 P.M., Tuesday, January 14, 1992

Place: Administration Bldg., Siemens Stromberg-Carlson Corp., Rinehart Road, Lake Mary. (Use second, or northernmost entrance to Siemens Stromberg-Carlson)

Contacts: Michael Germain (678-5599) or Ed Ellis (834-3319).

COMPUTER SOCIETY/UCF STUDENT CHAPTER (COMP)

Data Structures - Accessing Multidimensional Data

Speaker: Dr. Teofilo F. Gonzalez, Dept. of Computer Science, University of California at Santa Barbara.

Date: Wednesday, January 29, 1992

Time & Place: 5:00-6:00 P.M., UCF, CCII Bldg, Room 103

Data Compression-Complexity Aspects of Map Compression

Date: Thursday, January 30, 1992

Time & Place: 10:00-11:00 AM, UCF, CCII Bldg, Room 103

Contact: Ashley Fleeman (823-2616) or Sheau Lang (823-2474). Refreshments will be served before the meeting.

POWER ENGINEERING/INDUSTRY APPLICATIONS (PE/IA)

Zero Discharge

Speaker: Greg Demuth

Date: Thursday, January 16, 1992

Time & Place: 6:00 P.M. Dinner at Ronnie's Restaurant (Colonial Plaza Mall), Meeting at 7:30 P.M.

Contact: Tim Turba (423-7967 Ext. 3822), Jim Pipkin (281-2916) or Mike Dodane (896-6765)

SIGNAL PROCESSING & COMPUTER SOCIETY (SP)

Distributed Arithmetic for Signal Processing

Speaker: Dr. Stan White, Distinguished National Lecturer

Date: Wednesday, February 12, 1992

Time & Place: 5:00 PM, UCF Engineering Bldg., Room 122.

Contact: Dave King (356-1836)

AWARDS BANQUET

Sunday, March 1, 1992

Aboard the Rivership Grand Romance

Steamboatin' On the St. Johns River

- Boarding at Sanford Marina: 3:30 to 4:00 P.M.
(433 N. Palmetto Ave., Sanford)
- Steamboat Departure: 4:00 P.M. sharp
- Hors d'oeuvre & Cash Bar: 3:30 to 5:00 P.M.
- Dinner on Main Deck: 5:00 to 5:45 P.M.
- Awards Program in Citrus Room on Top Deck: 6:00 to 7:00 P.M.
- Steamboat Returns to Dock: 7:00 P.M.

Guaranteed Seating: 40 persons
Paid Reservation Deadline: January 31, 1992
Rate: \$25 per person

Contact Dr. M. Ali Atashroo
539-0465 (home), 356-6914 (work)
or IEEE Voice Information Center
260-1676

IEEE ORLANDO SECTION
Region 03 Council 05 Section 51



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AP/MTT: Jeff Rollman, (Bus.) 356-6310
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SP: Dave King
(Bus.) 356-1836, (Home) 628-4462
SRC: Dr. Michael G. Harris
(Bus.) 823-2548, (Home) 366-1214
UFFC: Brent Horine (Bus.) 886-8860
Student Branch: Chuck Fulks 277-0456

IEEE Voice Information Center
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Jorge Medina, Section Chairman

Chairman's Corner

I hope you and your families had a happy and safe celebration and want to extend, on behalf of the members of the Executive Committee, best wishes to everyone for a *Happy New Year!*

This past month, the Orlando Section was honored with a visit by the IEEE Regional, National Board of Directors and the Florida Council of the IEEE. Meetings were held at the Hilton at Walt Disney World Village. Officers of the Orlando Section were invited to participate in some of their events.

We are hoping to have a large list of nominations for the Section's Outstanding Engineer, as well as the Outstanding Engineering Educator Awards. We need your help in getting that nomination list; please use the Orlando Section Award Candidate Search form published in our November Orlando Section Monthly, or call **Madjid Belkerdid**, or any member of the executive committee for assistance.

Each one of the Section's ten chapters will also honor a chapter Engineer of the Year during the Awards Banquet. Our chapters have been very active this year, and I am sure they will also continue the tradition of participation in the awards program this year as well.

The Awards Banquet is scheduled for March 1, 1992 aboard the Rivership Grand Romance in Sanford. **Ali Atashroo**, our Section Vice Chairman and Programs Chairman promises an interesting and enjoyable time for all and he should be contacted for reservations or further information.

A good New Year's resolution might include greater participation in your professional society, and attendance at the

Awards Banquet is a good way to get started. The Chapter and Section officers will be delighted to see you there as some evidence of their efforts to serve the membership. Please give serious consideration to attending and to making a timely reservation.

SOUTHCON returns to Orlando on March 10th through the 12th, 1992 at the Orange County Convention/Civic Center. Over 400 exhibitors will be present. Mark your calendars to attend this event. Details and complimentary registration are contained in this issue.

Information about the upcoming banquet and other events can be obtained from our **Voice Information Center** (260-1676). If you have any professional announcements or classified ads, please contact me and we will make every effort to include them into the Orlando Section Monthly issues.

Our IEEE Orlando Section Executive Committee meetings are held the first Tuesday of every month except the month of July, at Hewlett-Packard, 6177 Lake Ellenor Drive, Orlando, at 5:30 P.M. Bob Smallwood always provides very nice refreshments for us at our meetings and we thank him and Hewlett Packard for their hospitality. *Come join us!*

Orlando Section Monthly Advertisement Rates

The Orlando Section of the IEEE encourages placement of technical, professional, promotional, and commercial advertisement in the *Monthly*. The *Monthly*, read by more than 1,400 members and over 100 key area industries, is published 11 times a year, August through June. The due date for the receipt of the camera ready ad and payment is the **1st Tuesday** of the month preceding the month of publication.

| Ad Size | Rate | Discounted Rate (more than one issue) |
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| Two Page | \$450 | \$390 |
| Full Page | \$300 | \$255 |
| 3/4 Page | \$255 | \$225 |
| 2/3 Page | \$225 | \$195 |
| Half Page | \$195 | \$165 |
| 1/3 Page | \$165 | \$135 |
| 1/4 Page | \$135 | \$105 |
| 1/6 Page | \$80 | \$72 |
| Preprinted Insert | \$195 | \$165 |

One Eighth (Business Card: 3.5 X 2.25 or 2.5 X 3.25) size ads will be placed at a promotional rate of \$50 per issue for a minimum of four consecutive issues, or \$37.50 per issue for five consecutive issues. Please call the IEEE Voice Information Center or Carmen Medina (407) 260-1676 to place your ads.

IEEE ORLANDO SECTION VIDEO LIBRARY

EDUCATIONAL COMMITTEE

borrow any of the videos listed below, simply complete the attached order form and mail to the Educational Committee Chairman. There is no charge to the IEEE Orlando Section Chapters for their use. The Chapter will be responsible for return postage for the video, for providing a meeting room and projection equipment, and for making copies of any handouts which may accompany the video. Making copies of the video tapes is prohibited.

Videoconference materials are available only to IEEE Orlando Section Chapters with attendance limited to IEEE members. These are selected programs from IEEE's ongoing Seminars via Satellite series on timely engineering topics. Each video runs several hours and would be suitable for a day long program.

LOAN REQUEST FORM

IEEE ORLANDO SECTION VIDEO LIBRARY EDUCATION COMMITTEE

c/o Dr. Kalpathy Sundaram
University of Central Florida
Dept. of Electrical Engineering
Orlando, FL 32816
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Home: 407-671-6843
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|-----------|--|-------------|-------------|
| EV 0388-9 | Digital Signal Processing | _____ | _____ |
| EV 0372-3 | GaAs Monolithic Microwave IC | _____ | _____ |
| HV 0102-4 | Adaptive Resonance | _____ | _____ |
| HV 0106-5 | Competitive and Cooperative Learning Systems | _____ | _____ |
| HV 0121-4 | Spread Spectrum Communications | _____ | _____ |
| HS 0177-6 | Error Correcting Codes for Digital Signal Processing | _____ | _____ |
| HS 0170-1 | Introduction to Modem Technology, Theory and Practice of Bandwidth Efficient Modulation from Shannon and Nyquist to date | _____ | _____ |
| HV 0118-0 | Light Wave Communications | _____ | _____ |
| EV 0362-4 | Photonic Switching (VC25) | _____ | _____ |
| HV 0159-4 | Robotic/90 Package | _____ | _____ |
| HV 0160-2 | Modeling and Control of Automatic Manufacturing Systems | _____ | _____ |

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| HV 0202-2 | Parallel Processing | _____ | _____ |
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| HV 0200-6 | Distributed Supercomputing | _____ | _____ |
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| HV 0070-3 | Unsymmetrical Short Circuits | _____ | _____ |
| HV 0071-1 | Applications to Industrial Power Distribution | _____ | _____ |
| HV 0162-8 | Sensor Based Planning and Control in Robotics | _____ | _____ |
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| HS 0172-7 | Submicron BiCMOS Process Tech. | _____ | _____ |
| HS 0173-5 | Submicron CMOS Technology Scaling | _____ | _____ |
| HS 0169-3 | What is all this about GaAs | _____ | _____ |
| HS 0166-9 | 11 Rules of Supercomputer Design | _____ | _____ |
| HV 0116-4 | Gallium Indium Arsenide Hetero-structures for Low Noise Amplification, High Speed Logic Circuits and Light Detection | _____ | _____ |
| HV 0117-2 | Gallium Arsenide - Key to Modern Microwave Technology | _____ | _____ |
| 1988 AV | Artificial Neural Systems | _____ | _____ |
| HV 124 | Neural Networks: Adaptive Pattern Recognition | _____ | _____ |
| HV 127 | Neural Networks: Algorithms and Microhardware | _____ | _____ |
| HV 129 | Neural Networks: Optical Neuro-computers | _____ | _____ |

SEND VIDEO TAPE TO:

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In Memoriam

The Orlando Section of the IEEE extends its sympathy to the Summers family for the death of Mr. Charnelle H. "C.H." Summers, a Life Senior Member of the IEEE who passed away on September 18, 1991

Congratulations

The Orlando Section of the IEEE extends its Congratulations to Jackie Hines (Orlando Section Treasurer), and her husband, Andy, on the birth of their first son, Andrew Hines II, born on December 3, 1991 and weighing 9.5 lbs.

IEEE Orlando Section
150 S. County Rd 427, Suite 215
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IEEE Orlando Section Monthly

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IEEE ORLANDO SECTION - EVENTS CALENDAR

For the latest and/or additional information call the IEEE Voice Information Center (407) 260-1676

- Jan. 7 IEEE Orlando Section - *Executive Committee Meeting*, Hewlett Packard, Jorge Medina (260-1676)
Jan. 14 COM/VT - *Intelligent Networks for Telecommunications*, Michael Germain (678-5599)
Jan. 16 AP/MTT - *GaAs MIMICS and Applications*, Hewlett Packard, Jeff Rollman (356-6310)
Jan. 16 PE/IA - *Zero Discharge*, Ronnie's Restaurant, Tim Turba (423-7967 Ext. 3822)
Jan. 29 COMP - *Data Structures - Accessing Multidimensional Data*, UCF, Sheau Lang (823-2474)
Jan. 30 COMP - *Data Compression - Complexity Aspects of Map Compression*, UCF, Sheau Lang (823-2474)
- Feb. 4 IEEE Orlando Section - *Executive Committee Meeting*, Hewlett Packard, Jorge Medina (260-1676)
Feb. TBA COMP - *TRAM: A Design Methodology for High Performance, Easily Testable, Multimegabit RAMs*, UCF, Sheau Lang (823-2474)
Feb. TBA COMP - *The DeBruijn Multiprocessor Network: A Versatile Parallel Processing and Sorting Network for VLSI*, UCF, Sheau Lang (823-2474)
Feb. 12 SP & COMP - *Distributed Arithmetic for Signal Processing*, UCF, Dave King (356-1836)
Feb. 16-22 National Engineers Week
Feb. 20 AP/MTT - *High Temperature Superconductors*, Hewlett Packard, Jeff Rollman (356-6310)
- Mar. 1 Awards Banquet- *Aboard the Rivership Grand Romance*, Sanford, FL, Ali Atashroo (539-0465, 356-6914 or VIC 260-1676)
Mar. 3 IEEE Orlando Section - *Executive Committee Meeting*, Hewlett Packard, Jorge Medina (260-1676)
Mar. TBA COMP - *Using Algorithm Characteristics to Make Parallel Computer Usable*, UCF, Sheau Lang (823-2474)
Mar. TBA COMP - *Parallelism and the FFT*, UCF, Sheau Lang (823-2474)
Mar. 10-12 SOUTHCON '92 - *Electronic Show and Convention*, Orange County Convention/Civic Center, Orlando, FL
Mar. 19 AP/MTT - *High Temperature Superconductors*, Hewlett Packard, Jeff Rollman (356-6310)
- Apr. 7 IEEE Orlando Section - *Executive Committee Meeting*, Hewlett Packard, Jorge Medina (260-1676)
Apr. TBA COMP - *Panel Discussion on Work Ethics*, UCF, Sheau Lang (823-2474)
- May 5 IEEE Orlando Section - *Executive Committee Meeting*, Hewlett Packard, Jorge Medina (260-1676)
May 18 COMP - *General Meeting and Election of Chapter Officers for 1992-93*, UCF, Sheau Lang (823-2474)
- Jun. 2 IEEE Orlando Section - *Executive Committee Meeting*, Hewlett Packard, Jorge Medina (260-1676)
Jun. TBA Installation Banquet - Ali Atashroo (539-0465, 356-6914 or VIC 260-1676)

IEEE Orlando Section Awards Banquet



Sunday, March 1, 1992

Aboard the Rivership Grand Romance

Steamboatin' On the St. Johns River

(Near I-4, eighteen miles northeast of Orlando.)

Take exit 51 east five traffic lights into downtown Sanford.

Turn left on Palmetto Avenue and go three blocks to Monroe Harbor Marina)

Program:

- Boarding at Sanford Marina:..... 3:30 to 4:00 P.M.
(433 N. Palmetto Ave., Sanford)
- Steamboat Departure:..... 4:00 P.M. sharp
- Hors d'oeuvre & Cash Bar:..... 3:30 to 5:00 P.M.
- Dinner on Main Deck:..... 5:00 to 5:45 P.M.
- Awards Program in Citrus Room on Top Deck:... 6:00 to 7:00 P.M.
- Steamboat Returns to Dock:.....7:00 P.M.

Guaranteed Seating: 40 persons
 Paid Reservation Deadline: January 31, 1992
 Rate: \$25 per person

Contact Dr. M. Ali Atashroo
 539-0465 (home), 356-6914 (work)
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IEEE ORLANDO SECTION
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Sr. Past Chairman: Dr. Gene K. Huddleston
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AP/MTT: Jeff Rollman, (Bus.) 356-6310
COMP: Dr. Sheau D. Lang*
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*Fax 823-5835

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Jorge Medina, Section Chairman

Chairman's Corner

The Awards Banquet is scheduled for March 1, 1992 aboard the Rivership Grand Romance in Sanford. All Section members, friends, dates and spouses are invited. I am also calling on all Section and chapter officers to attend this year's big event. You may call **Ali Atashroo**, our Section Vice Chairman and Programs Chairman, to get more information and to make reservations. Seating is limited to 40 persons and all reservations must be paid by January 31, 1992.

National Engineers Week is scheduled for February 16-22 and is sponsored by IEEE along with thirteen other similar organizations. **Tim Turba** and the PE/IA chapter are sponsoring a breakfast at UCF during this period to encourage careers in Power Engineering. Our Section will have a booth at UCF with literature and information about the IEEE. Please join us in supporting this dynamic and important event, for the benefit of your community and your profession. To learn more about participating in National Engineers Week, please contact our Section PACE chairman, **Glenn Portz**. The National Engineers Week can help you turn your ideas into reality.

Nominations for Section and Chapter officers will be coming up in the March-May time frame. **Dave King, Jeff Rollman** and **Bob Smallwood** have been appointed as the nominating committee for the Section officers. You may be interested in becoming more involved in either Section or Chapter operations. If interested in Section service, please contact Dave, Jeff or Bob; for Chapter service, contact the respective chapter chairman.

The Orlando Section and the PE/IA chapter are pleased to announce that at the October 1991 IAS Executive Board

meeting it was voted to have the Industry Applications Society (IAS) 1995 annual meeting at the Hilton Hotel, Lake Buena Vista, on October 8-13, 1995. The IAS Executive Board appointed **Ed Lobnitz** to be the General Chairman for this meeting.

The Senior membership drive is still on, and I urge each one of you to identify friends, and co-workers who qualify for the upgrade. Congratulations to **Kalpathy B. Sundaram** who has been advanced to the grade of Senior Member in the IEEE.

Our IEEE Orlando Section Executive Committee meetings are held the first Tuesday of every month except the month of July, at Hewlett-Packard, 6177 Lake Ellenor Drive, Orlando, at 5:30 P.M. *Come join us!*



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Members are encouraged to invite and bring guests to these events.

AEROSPACE AND ELECTRONIC SYSTEMS (AES)

Artificial Neural Networks

Speaker: Dr. Farhan Faruqi (Includes a video presentation)
Date: Thursday, January 30, 1992
Time: 7:30 PM
Location: Technology Consulting Center, 822 E. Wallace St. Orlando.
Contact: David Flinchbaugh (859-7310, ext.34)

ANTENNAS AND PROPAGATION/ MICROWAVE THEORY AND TECHNIQUES (AP/MTT)

High Temperature Superconductors

Date: Thursday, February 20, 1992
Time: Refreshments at 5:30 P.M., Meeting at 6:00 PM
Location: Hewlett Packard, Dinner at Outback Steakhouse (Florida Mall) after meeting.
Contact: Jeff Rollman (356-6310)

Spacecraft and Aircraft Antennas

Date: Thursday, March 19, 1992

ELECTRON DEVICES/COMPONENTS, HYBRIDS, MANUFACTURING TECHNOLOGY (ED/CHMT)

Patent Issues for Software & Algorithms

Speaker: Mr. Herbert L. Allen, Attorney
Date: Thursday, March 12, 1992
Time: 6:30 PM
Location: Orlando Public Library (Rosalind & Central)
Contact: Bob Canright (263-8198)

POWER ENGINEERING/INDUSTRY APPLICATIONS (PE/IA)

Competitiveness in the Engineering Market

Speaker: Art Fenton
Date: February 20, 1992
Time: 7:30 PM
Location: UCF Campus, the University dining room
Contacts: Tim Turba (423-7967 Ext. 3822), Jim Pipkin (281-2116) or Mike Dodane (896-6765)

SIGNAL PROCESSING SOCIETY (SP)

Distributed Arithmetic for Signal Processing

Speaker: Dr. Stan White, Distinguished national lecturer
Date: Wednesday, February 12, 1992
Time: 5:00 PM
Location: UCF, BA121
Contact: Dave King (356-1836)

COMPUTER SOCIETY/UCF STUDENT CHAPTER (COMP)

The On-Line d-Dimensional Dictionary Problem and It's Applications

Speaker: Teofilo F. Gonzalez, Dept. of Computer Science, University of Santa Barbara
Abstract: The on-line d -dimensional dictionary problem consists of executing on-line any sequence of operations of the form: INSERT(p), DELETE(p) and MEMBERSHIP(p), where p is any point in d -space. The set of points is represented by a new generalization of balanced binary search trees, called d -dimensional balanced binary search trees. We show that any of the above operations can be implemented to take $O(d + \log n)$ time, where n is the current number of points in the set, and both INSERT and DELETE operations require no more than a constant number of rotations. We also discuss applications of the d -dimensional dictionary problems that arise when developing efficient approximation algorithms for the problem of covering a set of d -dimensional points with hyperrectangles.
Date: Wednesday, January 29, 1992
Time: 5:00-6:00 PM
Location: UCF, CCII Bldg., Room 103

Minimum Edge Length Partitions

Abstract: Given a set P of points that lie inside a rectangle R in the plane, we study the problem of partitioning R into rectangles by introducing a set of orthogonal line segments whose total length is the least possible. In a valid rectangular partition, each point in P must be included in at least one partitioning line segment. Since this problem is NP-hard and thus likely to be computationally intractable, we present several approximation algorithms for its solution. This partitioning problem has applications in the channel definition phase of CAD systems. We also discuss a generalization of the partitioning problem to the multidimensional case and show that some of our algorithms can be easily adapted to solve this more general problem.
Date: Thursday, January 30, 1992
Time: 10:00-11:00 AM,
Location: UCF, CCII Bldg., Room 103
Contact: Ashley Fleeman (823-2616) or Sheau Lang (823-2474).
Refreshments will be served before the meetings

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IEEE Orlando Section Monthly

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IEEE ORLANDO SECTION - EVENTS CALENDAR

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- Jan. 29 COMP - *The On-Line d-Dimensional Dictionary Problem and Its Applications*, UCF, Sheau Lang (823-2474)
- Jan. 30 AES - *Artificial Neural Networks*, Technology Consulting Center, David Flinchbaugh (859-7310, ext. 34)
- Jan. 30 COMP - *Minimum Edge Length Partitions*, UCF, Sheau Lang (823-2474)
- Feb. 4 IEEE Orlando Section - *Executive Committee Meeting*, Hewlett Packard, Jorge Medina (260-1676)
- Feb. TBA COMP - *TRAM: A Design Methodology for High Performance, Easily Testable, Multimegabit RAMs*, UCF, Sheau Lang (823-2474)
- Feb. TBA COMP - *The DeBruijn Multiprocessor Network: A Versatile Parallel Processing and Sorting Network for VLSI*, UCF, Sheau Lang (823-2474)
- Feb. 12 SP - *Distributed Arithmetic for Signal Processing*, UCF, Dave King (356-1836)
- Feb. 16-22 National Engineers Week
- Feb. 20 AP/MTT - *High Temperature Superconductors*, Hewlett Packard, Jeff Rollman (356-6310)
- Feb. 20 PE/IA - *Competitiveness in the Engineering Market*, UCF, Tim Turba (423-7967 ext. 3822)
- Mar. 1 Awards Banquet- *Aboard the Rivership Grand Romance*, Sanford, FL, Ali Atashroo (539-0465, 356-6914 or VIC 260-1676)
- Mar. 3 IEEE Orlando Section - *Executive Committee Meeting*, Hewlett Packard, Jorge Medina (260-1676)
- Mar. TBA COMP - *Using Algorithm Characteristics to Make Parallel Computer Usable*, UCF, Sheau Lang (823-2474)
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- Mar. 10-12 SOUTHCON '92 - *Electronic Show and Convention*, Orange County Convention/Civic Center, Orlando, FL
- Mar. 12 ED/CHMT - *Patent Issues for Software & Algorithms*, Orlando Public Library, Bob Canright (263-8198)
- Mar. 19 AP/MTT - *Spacecraft and Aircraft Antennas*, Hewlett Packard, Jeff Rollman (356-6310)
- Apr. 7 IEEE Orlando Section - *Executive Committee Meeting*, Hewlett Packard, Jorge Medina (260-1676)
- Apr. TBA COMP - *Panel Discussion on Work Ethics*, UCF, Sheau Lang (823-2474)
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- May 18 COMP - *General Meeting and Election of Chapter Officers for 1992-93*, UCF, Sheau Lang (823-2474)
- Jun. 2 IEEE Orlando Section - *Executive Committee Meeting*, Hewlett Packard, Jorge Medina (260-1676)
- Jun. TBA Installation Banquet - Ali Atashroo (539-0465, 356-6914 or VIC 260-1676)



President Bush Pays Tribute

President Bush has provided a message congratulating engineers on their accomplishments and vision in "Turning Ideas Into Reality." His message is reproduced here.

THE WHITE HOUSE

WASHINGTON

December 10, 1991

Through the ages, man has marvelled at the beauty and the mysteries of nature. Yet, while we can be thankful for the infinite wonders of Creation, we also know that most human progress has been achieved through a constant struggle against the elements. The power plants that bring heat and light to our homes, the farm equipment and refrigerators that enable us to reap and store an abundance of food, and the satellites and radar that warn us of impending storms -- all represent triumphs over the less hospitable aspects of nature. We owe a great deal to engineers for such technology, and during National Engineers Week, we celebrate the many contributions that engineers have made to our safety, comfort, and convenience.

The 1992 observance of National Engineers Week is a special one because it coincides with the 500th anniversary of Christopher Columbus's historic journey to the Americas. Engineers conduct their work in the same spirit of exploration and discovery that we celebrate during this quincentenary, and it is wonderful to know that thousands of engineers are helping to introduce their exciting profession to young Americans. Such efforts go hand in hand with achieving one of our most important National Education Goals: to ensure that American students rank "first in the world" in mathematics and in science. National Engineers Week is a splendid opportunity to show children that these subjects are not only fun but also keys to a bright future.

I join with Americans across the land in paying tribute to engineers everywhere and in thanking them for their contributions to the progress and the well-being of our country and the world.

IEEE ORLANDO SECTION

Region 03 Council 05 Section 51



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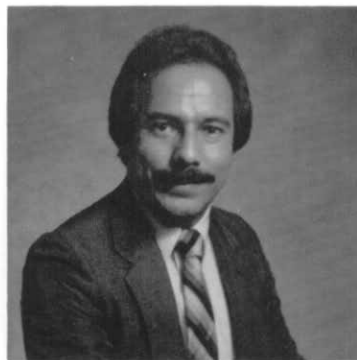
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- AP/MTT:** Jeff Rollman, (Bus.) 356-6310
- COMP:** Dr. Sheau D. Lang*
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- PE/IA:** Tim Turba (Home) 264-2578
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- SP:** Dave King
(Bus.) 356-1836, (Home) 628-4462
- SRC:** Dr. Michael G. Harris*
(Bus.) 823-2548, (Home) 366-1214
- UFFC:** Brent Horine (Bus.) 886-8860
- Student Branch:** Chuck Fults 277-0456*
*Fax 823-5835

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Jorge Medina, Section Chairman

Chairman's Corner

Congratulations to our award winners for 1992! Having served on the selection committee, I can tell you it was a close and difficult decision. All of our candidates had an excellent record of accomplishments.

Southcon/92 will be center stage in Orlando on March 10 through 12 at the Orange County Convention/Civic Center. I hope by now you have mailed in your advanced registration form. If you need a complimentary registration form, you may pick one up at our next Executive Committee meeting on March 3rd. I hope you take the opportunity to attend this major event.

Our Section has to submit a financial and meeting report to the IEEE Headquarters by February 1st of each calendar year. Our Finance Committee, chaired by our Section Treasurer, **Jacqueline Hines**, prepared and balanced our Section finances and the financial reports were mailed to Piscataway on time. An accurate and complete meeting report was also compiled and mailed to Headquarters by our Section Secretary, **Parveen Wahid**, before the due date. Thanks Jackie and Parveen for a job well done!

We will be looking for some new blood to help run the Section as we get ready to elect new officers. If interested in Section service, please call **Glenn Portz, Jeff Rollman, Bob Smallwood** or our **Voice Information Center**. Some of you may be disappointed in the lack of activities in your Chapters. Chapter elections are coming up. Now is the time to become active in your Chapter and do something to make it better. None of us has time on our hands, but if something is important, we find a way to make time available. Do yourself a favor and make some time for professional activities in the IEEE. For Chapter service, please contact the respective Chapter Chairman or our Voice Information Center.

An Election Committee will be appointed in April if there is more than one nominee for any Section office. Ballots, if needed, will be published in the May issue of our newsletter. All nominations from the membership should

be submitted with the required petition to the Section Chairman before April 1st, as required by the Section Bylaws.

This professional organization, the largest in the world, is mainly managed and run by volunteers like you and me. The IEEE purposes are technical, scientific, literary, and educational and are directed to the advancement of the theory and practice of Electrical and Electronics Engineering.

Our IEEE Orlando Section Executive Committee meetings are held the first Tuesday of every month except the month of July, at Hewlett-Packard, 6177 Lake Ellenor Drive, Orlando, at 5:30 P.M. *Come join us!* ♦

Report of Nominations Committee

Glenn Portz, Jeff Rollman and Bob Smallwood

In accordance with the Section Bylaws, the following nominations for Section Officers for terms beginning July 1, 1992 and ending June 30, 1993, are as follows:

- Chairman:** Ali Atashroo
- Vice Chairman:** Jacqueline Hines
- Treasurer:** Parveen Wahid
- Secretary:** Dave King

Each person was contacted by the Nominations Committee and was found to be qualified and willing to serve, if elected. ♦

Orlando Section Monthly Advertisement Rates

The Orlando Section of the IEEE encourages placement of technical, professional, promotional, and commercial advertisement in the *Monthly*. The *Monthly*, read by more than 1,400 members and over 100 key area industries, is published 11 times a year, August through June. The due date for the receipt of the camera ready ad and payment is the **1st Tuesday** of the month preceding the month of publication.

| Ad Size | Rate | Discounted Rate (more than one issue) |
|-------------------|-------|--|
| Two Page | \$450 | \$390 |
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| 3/4 Page | \$255 | \$225 |
| 2/3 Page | \$225 | \$195 |
| Half Page | \$195 | \$165 |
| 1/3 Page | \$165 | \$135 |
| 1/4 Page | \$135 | \$105 |
| 1/6 Page | \$80 | \$72 |
| Preprinted Insert | \$195 | \$165 |

One Eighth (Business Card: 3.5 X 2.25 or 2.5 X 3.25) size ads will be placed at a promotional rate of \$50 per issue for a minimum of five consecutive issues, or \$37.50 per issue for eight consecutive issues. Please call the IEEE Voice Information Center or Carmen Medina (407) 260-1676 to place your ads.

MEETING ANNOUNCEMENTS

Unless otherwise stated, non-IEEE members are welcome to attend the meetings listed here. Members are encouraged to invite and bring guests to these events.

ANTENNAS AND PROPAGATION/ MICROWAVE THEORY AND TECHNIQUES (AP/MTT)

Spacecraft and Aircraft Antennas

Date: Thursday, March 19, 1992
Time: Refreshments at 5:30 P.M., Meeting at 6:00 PM
Location: Hewlett Packard, Dinner at Outback Steakhouse (Florida Mall) after meeting.
Contact: Jeff Rollman (356-6310)

COMPUTER SOCIETY/UCF STUDENT CHAPTER (COMP)

Using Algorithm Characteristics to Make Parallel Computer Usable

Date: March, TBA
Time: 5:00-6:00 PM
Location: UCF, CCII Bldg., Room 103

Parallelism and the FFT

Date: March, TBA
Time: 10:00-11:00 AM,
Location: UCF, CCII Bldg., Room 103
Contact: Ashley Fleeman (823-2616) or Sheau Lang (823-2474).
 Refreshments will be served before the meetings

ELECTRON DEVICES/COMPONENTS, HYBRIDS, MANUFACTURING TECHNOLOGY (ED/CHMT)

Patent Issues for Software & Algorithms

Speaker: Mr. Herbert L. Allen, Attorney
Date: Thursday, March 12, 1992
Time: 6:30 PM
Location: Orlando Public Library (Rosalind & Central)
Contact: Bob Canright (263-8198)

ULTRASONICS, FERROELECTRICS, AND FREQUENCY CONTROL (UFFC)

SAW Based Sensor Technology and Applications

Speaker: Brent Horine
Date: Thursday, March 12, 1992
Time & Place: TBA
Contact: Brent Horine (886-8860)

Ultrasonics of High T_c and Other Unconventional Superconductors

Speaker: Moisés Levy, Distinguished Lecturer
Date: Thursday, April 2, 1992
Time & Place: TBA, Dinner before meeting
Contact: Brent Horine (886-8860)

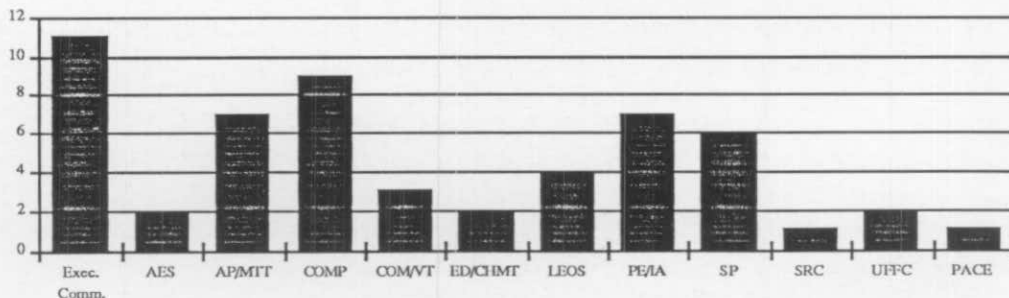
POWER ENGINEERING/INDUSTRY APPLICATIONS (PE/IA)

Lightning Protection and Grounding Technology

Date: Tuesday, March 24, 1992
Time & Place: 6:00 P.M. Dinner at the Olive Garden on East Highway 50, Meeting at 7:30 P.M. at Westinghouse
Contact: Tim Turba (423-7967 Ext. 3822), Jim Pipkin (281-2916) or Mike Dodane (896-6765)

IEEE ORLANDO SECTION ACTIVITY SUMMARY - 1991

1991 CHAPTER MEETINGS



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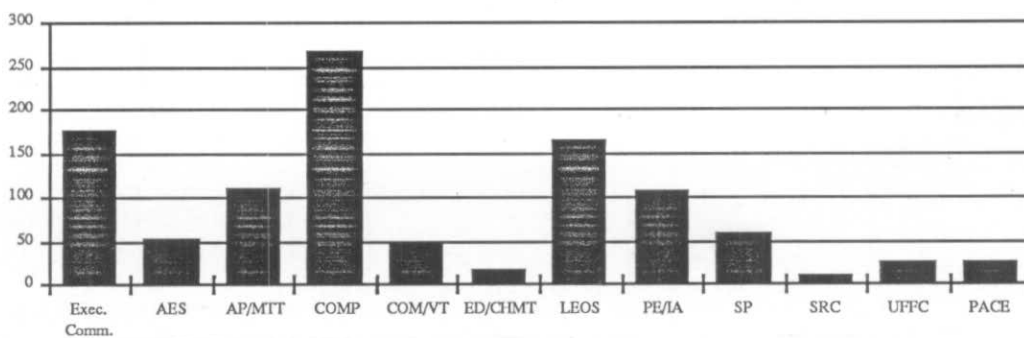
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1991 CHAPTER ATTENDANCE



IEEE ORLANDO SECTION - EVENTS CALENDAR

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- Mar. 1 Awards Banquet- *Aboard the Rivership Grand Romance*, Sanford, FL, Ali Atashroo (539-0465, 356-6914 or VIC 260-1676)
- Mar. 3 IEEE Orlando Section - *Executive Committee Meeting*, Hewlett Packard, Jorge Medina (260-1676)
- Mar. TBA COMP - *Using Algorithm Characteristics to Make Parallel Computer Usable*, UCF, Sheau Lang (823-2474)
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- Mar. 12 UFFC - *SAW Based Sensor Technology and Applications*, Brent Horine (886-8860)
- Mar. 19 AP/MTT - *Spacecraft and Aircraft Antennas*, Hewlett Packard, Jeff Rollman (356-6310)
- Mar. 24 PE/IA - *Lightning Protection and Grounding Technology*, Tim Turba (423-7967 Ext. 3822)

- Apr. 2 UFFC - *Ultrasonics of High T_c and Other Unconventional Superconductors*, Brent Horine (886-8860)
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- Jun. TBA Installation Banquet - Ali Atashroo (539-0465, 356-6914 or VIC 260-1676)



IEEE Orlando Section 1992 Awards Banquet

The 1992 Awards Banquet was held on March 1 aboard the Rivership Grand Romance and attended by 53 people.

We made eight Chapter Engineer-of-the-Year Awards, six student awards, and two important Section Awards: Outstanding Engineering Educator, and Outstanding Engineer. In addition, we were pleased to have **Russell M. Dreadin** from the Florida Council of the IEEE to announce that the Orlando Section will be awarded the Region 3 Exemplary Section Award at SouthEastCon '92, in Birmingham, Alabama.

The Chapter Engineer-of-the-Year Awards are designed to recognize members who, through their technical and professional abilities, have made outstanding contributions to their profession. Evaluation criteria include importance of technical contribution, output of patents, proprietary designs, papers and technical presentations, service to the IEEE, and service to the engineering profession.

Chapter Engineer-of-the-Year Awards

Nominations for the EOY awards come primarily from the ten chapters in the Section. Because of this, each Chapter Chairman was asked to make the award for his chapter. The Chapter Engineer-of-the-Year awards were as follows:

**Antennas and Propagation/
Microwave Theory and Techniques**
Dr. G. Keith Huddleston

Computer
Dr. Ratan Guha

Communications/Vehicular Technology
Dr. Michael Georgiopoulos

**Electron Devices/
Components, Hybrids and Manufacturing
Technology**
Dr. J.J. Liou

Power Engineering/Industry Applications
Robert Gray

Signal Processing
Dr. Ikram Abdou

**Systems, Man and Cybernetics/
Robotics and Automation/Control Systems**
Dr. Robert Martin

**Ultrasonics, Ferroelectrics and Frequency
Control**
Ronald M. Hays, Jr.

Student Awards

This year the Orlando Section presented six student awards. In addition to a certificate, each student received a \$100 check from the Section. The student awards were as follows:

**Outstanding Senior Student in Electrical
Engineering**
Mark Aronson

**Outstanding Graduate Student in
Electrical Engineering**
Jeffrey Zuelch

**Outstanding Senior Student in SRC
Chapter**
Jamie McGauhey

**Outstanding Graduate Student in SRC
Chapter**
Dean Dubois

**Outstanding Senior Student in COMP
Chapter**
Laurel D. McConnell

**Outstanding Graduate Student in COMP
Chapter**
Raymond Ashley Fleeman

Section Awards

Again this year, there were many excellent and well-qualified nominations for the two Section Awards.

The Orlando Section **Outstanding Engineering Educator Award** is designed to recognize members who, through their academic contributions, have enhanced the engineering profession. This year's winner is **Dr. Wasfy B. Mikhael**, Professor of the Electrical Engineering Department at the University of Central Florida.

The Orlando Section **Outstanding Engineer Award** is designed to recognize Orlando Section members who through their technical and professional abilities have made outstanding contributions to their professions. This year's winner is **Dr. Gene Keith Huddleston**, Director of Radar Engineering at Martin Marietta Electronic Systems Group in Orlando.

Special thanks goes to **Dave King**, who provided photographic coverage throughout the ceremonies. And special thanks to the Section's Programs Chairman, **All Atashroo**, for making all the arrangements and who served as Master of Ceremonies. The Section thanks the nominees, Chapter Chairmen, and members of the Awards Committee for all the help they provided in supporting the 1992 IEEE Orlando Section awards nominations.



Ronald M. Hays, Jr. (left) UFFC EOY; Dr. Ratan Guha, COMP EOY; Robert Gray, PE/IA EOY; Dr. Ikram Abdou, SP EOY; Dr. G. Keith Huddleston, AP/MTT EOY and Outstanding Engineer; Dr. Wasfy B. Mikhael, Outstanding Engineering Educator, and Dr. J.J. Liou, ED/CHMT EOY.



Dean Dubois (left), Outstanding Graduate Student in SRC Chapter; Jeffrey Zuelch, Outstanding Graduate Student in Electrical Engineering; Jamie McGauhey, Outstanding Senior Student in SRC Chapter; Laurel D. McConnell, Outstanding Senior Student in COMP Chapter; Raymond Ashley Fleeman, Outstanding Graduate Student in COMP Chapter, and Mark Aronson, Outstanding Senior Student in Electrical Engineering.



Russell M. Dreadin (right), FCIEEE Chairman, announces the upcoming Region 3 Exemplary Section Award to Jorge Medina, Orlando Section Chairman.

IEEE ORLANDO SECTION
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UFFC: Brent Horine (Bus.) 886-8860
Student Branch: Chuck Fulks 277-0456*
*Fax: 823-5835, **Fax: 823-5419

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Jorge Medina, Section Chairman

Chairman's Corner

The Awards Banquet was held on March 1 aboard the Rivership Grand Romance in Sanford, and it was quite a delightful event with over 50 attendees. Eight of our ten chapters presented their awards for Engineer-of-the-Year as detailed on the front cover of this issue. Our congratulations especially go to **Dr. Wasfy B. Mikhael** of UCF as the Section Outstanding Engineering Educator and to **Dr. Gene Keith Huddleston** of Martin Marietta for the Section Outstanding Engineer. We have also learned from our Awards Banquet guest, **Russell M. Dreadin**, FCIEEE Chairman, that the Orlando Section has been selected as one of the Region 3 Exemplary Sections for 1992. I will be receiving this award on April 12 in Birmingham during the Region 3 SouthEastCon '92.

My appreciation is extended to the Section officers who made the Awards Ceremonies happen; **All Atashroo** for selecting the site, collecting the money and serving as the Master of Ceremonies; the Chapter Chairmen for conducting the awards selection; **Madjid Belkerdid** for obtaining, compiling, drafting and formatting the citation for each award recipient and for preparing all the certificates and plaques in a timely manner. Our "official" photographer, **Dave King**, also deserves our gratitude for his services.

The Orlando Section elects officers for a term of one year beginning July 1. This year the Nominating Committee has selected **All Atashroo** for Chairman, **Jacqueline Hines** for Vice Chairman, **Parveen Wahid** for Treasurer and **Dave King** for Secretary. These candidates are all well qualified active members of the Orlando Section. They have previously served on the Executive Board and as Chapter Chairmen, and I recommend them to you highly.

The Section membership may make additional nominations for these offices by submitting qualified petitions to the Section Chairman by April 1, 1992. The new officers will be installed at the Annual Installation Banquet of the Section to be held in June. The May Section Monthly will contain additional

information as well as the Voice Information Center (260-1676).

Chapter officers are specially encouraged to meet the same deadlines for election of new chapter officers. Our Chapters Chairman, **Sam Richie**, will be contacting all the Chapter Chairmen, reminding them to have a full slate of officers to be installed during the Installation Banquet. The new Chapter Chairmen will be required to elect the Society Chapters Representative (Chapters Chairman) at the August meeting. Our success has historically been based on new blood generated by officer rotation.

The next FCIEEE meeting will be held in Orlando on May 16 at the Holiday Inn by the Orlando International Airport. Members of the Orlando Section Executive Committee will be invited to this meeting.

Our IEEE Orlando Section Executive Committee meetings are held the first Tuesday of every month except the month of July, at Hewlett-Packard, 6177 Lake Ellenor Drive, Orlando, at 5:30 P.M. There will be some light refreshments to tide you over until dinner. *Come join us!* We are always looking for some new faces who would rather "light a candle than curse the darkness." ♦

EMPLOYMENT ASSISTANCE

Employment assistance continues to be emphasized by the PACE Committee. Unemployed members are urged to contact **Glenn Portz**, PACE Committee Chairman, at 644-2408 for more information. Also, the PACE committee has a library of information on:

1. Career Development
 - A. Avoiding Obsolescence
 - B. Skills Assessment
 - C. Transition to Management
 - D. Retirement Planning
2. Employment Issues
 - A. Hiring and Termination Practices
 - B. Discrimination, Age or Other
 - C. Legal Resources
3. Legislative Agenda
 - A. Pensions
 - B. Technology Positions
 - C. Congressional Fellows
4. Pre-college Education
 - A. Engineer's Week
 - B. Science Fairs
 - C. Student Conferences, e.g. S-PAC's
5. Intellectual Property Rights
 - A. Patents
 - B. Software

Contact Glenn Portz (644-2408) for further details. ♦

MEETING ANNOUNCEMENTS

Unless otherwise stated, non-IEEE members are welcome to attend the meetings listed here.
Members are encouraged to invite and bring guests to these events.

COMMUNICATIONS/VEHICULAR TECHNOLOGY (COM/VT)

Fiber Network Applications at Orlando International Airport

Speaker: Hugh J. Macbeth is Manager of Telecommunications and Information Systems at the Greater Orlando Aviation Authority, Orlando International Airport. He has been actively involved in the integration of data systems and network planning at Orlando.

Date: Wednesday April 8, 1992

Time: 7:00 PM

Location: Park in "A" side and meet by entrance and security to gates 1-50, Orlando International Airport

Contact: For reservations call Michael Germain (678-5599).

COMPUTER SOCIETY/ UCF STUDENT BRANCH (COMP)

Ethics in Business

Speaker: Richard C. Burning, General Counsel, Martin Marietta Electronics and Missiles Group

Abstract: Clearly, The Savings and Loan debacle and Junk Bond swindle demonstrated unethical behavior in business -- the jail terms prove it. Successful companies such as the jelly maker J.M. Smucker Co. incorporate "practicing strong ethical values" in their code of conduct. *Megatrends 2000* predicts the resurgence of an ethical philosophy for the individual that benefits all of mankind. In the final analysis, it is the individual employee that promotes ethical behavior.

Richard C. Burning, General Counsel for Martin Marietta's Electronics and Missiles Group, deals with the consequences of ethical and unethical decisions daily. He will present sound, practical advice that will help us with the sometimes difficult decisions we must each make in business. Plan join us to hear about this important topic.

Date: Tuesday, April 14, 1992

Time: 7:00 - 8:00 PM

Location: UCF, CCII Bldg., Room 103

Contact: Ashley Fleeman (823-2616) or Sheau Lang (823-2474). Refreshments will be served before the meetings

General Meeting and Election of Chapter Officers for 1992-1993

Date: Monday, May 18, 1992

Location: UCF, CCII Bldg., Room 103

Contact: Ashley Fleeman (823-2616) or Sheau Lang (823-2474). Refreshments will be served before the meetings

POWER ENGINEERING/INDUSTRY APPLICATIONS (PE/IA)

Westinghouse Panel Board Tour

Date: Tuesday, April 21, 1992

Time: Dinner TBA, Meeting at 7:30 P.M.

Location: Westinghouse

PES Executive Board Social Dinner

Date: Wednesday, April 22, 1992

Time: 6:30 PM Social, 7:30 PM Dinner

Location: Orlando Airport Marriot

Reservations: Call Tim Turba (423-7967 Ext. 3822) before April 17

PES Executive Board Meeting

Date: Thursday, April 23, 1992

Time: 8:00 AM - 4:00 PM

Location: Orlando Airport Marriot

Contact: Tim Turba (423-7967 Ext. 3822), Jim Pipkin (281-2916) or Mike Dodane (896-6765)

SYSTEMS, ROBOTICS AND CONTROLS (SRC)

Current Status in the Control of Robotic Manipulators

Speaker: Dr. Zhihua Qu

Date: Thursday, April 9, 1992

Time: 6:00 PM

Location: UCF, Engineering Building., Room 407D

Contact: Michael Harris (823-2548). Pizza and refreshments will be served before the meeting.

ULTRASONICS, FERROELECTRICS, AND FREQUENCY CONTROL (UFFC)

Ultrasonics of High T_c and Other Unconventional Superconductors

Speaker: Moisés Levy, Distinguished Lecturer

Date: Thursday, April 2, 1992

Time & Place: TBA, Dinner before meeting

Contact: Brent Horine (886-8860)

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The Orlando Section of the IEEE encourages placement of technical, professional, promotional, and commercial advertisement in the *Monthly*. The *Monthly*, read by more than 1,400 members and over 100 key area industries, is published 11 times a year, August through June. The due date for the receipt of the camera ready ad and payment is the 1st Tuesday of the month preceding the month of publication.

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For the latest and/or additional information call the IEEE Voice Information Center (407) 260-1676

- Apr. 2 UFFC - *Ultrasonics of High T_c and Other Unconventional Superconductors*, Brent Horine (886-8860)
- Apr. 7 IEEE Orlando Section - *Executive Committee Meeting*, Hewlett Packard, Jorge Medina (260-1676)
- Apr. 8 COM/VT - *Fiber Network Applications at Orlando International Airport*, Orlando International Airport, Michael Germain (678-5599)
- Apr. 9 SRC - *Current Status in the Control of Robotic Manipulators*, UCF, Michael Harris (823-2548)
- Apr. 14 COMP - *Ethics in Business*, UCF, Ashley Fleeman (823-2616), Sheau Lang (823-2474)
- Apr. 21 PE/IA - *Westinghouse Panel Board Tour*, Westinghouse, Tim Turba (423-7967 or 267-2155)
- Apr. 22-23 PES - *Executive Committee Board Meeting*, Orlando Airport Marriot, Tim Turba (423-7967)
- May 5 IEEE Orlando Section - *Executive Committee Meeting*, Hewlett Packard, Jorge Medina (260-1676)
- May 16 FCIEEE - *Executive Committee Meeting*, Holiday Inn at the Orlando International Airport, Mark Dreadin (904/484-5615 or 904/484-5270)
- May 18 COMP - *General Meeting and Election of Chapter Officers for 1992-93*, UCF, Sheau Lang (823-2474)
- May 26-29 EIPB '92 - *1992 International Symposium on Electron, Ion and Photon Beams*, Peabody Hotel, Orlando, Larry Thompson (908/582-2252)
- Jun. 2 IEEE Orlando Section - *Executive Committee Meeting*, Hewlett Packard, Jorge Medina (260-1676)
- Jun. TBA Installation Banquet - Ali Atashroo (539-0465, 356-6914 or VIC 260-1676)



THE INSTITUTE OF
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The Orlando Section Monthly

The Newsletter of the Orlando Section of the IEEE
(Serving Lake, Orange, Osceola, Seminole and Sumter Counties)

Volume XXV

May 1992

Number 10

MEETING ANNOUNCEMENTS

Unless otherwise stated, non-IEEE members are welcome to attend the meetings listed here. Members are encouraged to invite and bring guests to these events.

COMPUTER SOCIETY/ UCF STUDENT BRANCH (COMP)

General Meeting and Election of Chapter Officers for 1992-1993

Date: Monday, May 18, 1992
Time: TBA
Location: UCF, CCII Bldg., Room 103
Contact: Ashley Fleeman (823-2616) or Sheau Lang (823-2474). Refreshments will be served before the meetings

SYSTEMS, ROBOTICS AND CONTROLS (SRC)

Evolutionary Robotics:

Neural Nets, Genetic Algorithms, and Insect Robots

Speaker: Dr. Harley Myler
Date: Thursday, May 21, 1992
Time: 6:00 PM
Location: UCF, Engineering Building., Room 288
Contact: Michael Harris (823-2548). Pizza and refreshments will be served before the meeting.

FLORIDA COUNCIL OF THE IEEE (FCIEEE)

Executive Committee Meeting

Date: Saturday, May 16, 1992
Time: 9:00 AM to 4:00 PM
Location: Holiday Inn at the Orlando International Airport
Contact: Mark Dreadin (904/484-5615 or 904/484-5270)

Installation Banquet

Saturday, June 13, 1992

The Park Avenue Grill

358 N. Park Avenue
Winter Park, Florida 32789

Cash Bar

7:00 P.M. Dinner

Cost \$16.00 per person



For Reservations Call:



Ali Atashroo

356-6914, 539-0465 or V.I.C. 260-1676

Last day for reservations is June 8, 1992

☆ ONE MORE STAR SEARCH ☆

Madjid Belkerdid, Awards Chairman

As Chairman of the Awards Committee, I need your help one more time to identify nominees for the Outstanding Service Award to be presented at the Installation Banquet in June.

The Outstanding Service Award is designed to recognize members who, through their service to the Institute and their profession, have made outstanding contributions. Evaluation criteria include: service to the Institute or Region through offices held, committees or board activities, conference activities, PACE or others (40%); service to the Section (30%); non-IEEE service (20%); service to Society (10%).

Previous winners include *Don Malocha, George McClure, Frank Fluet, Ed Ellis, and Tom Nelson.*

Please use the enclosed Star Search form to nominate your candidate. Complete the form and send it to me by MAY 15th. I will solicit biographical information from each candidate for use at the June 2nd meeting of the Executive Committee in deciding the winner. I will make the nomination process as painless as possible for the nominators! My address and telephone are:

UCF, EECS Dept., Orlando, FL 32816; Home: 699-4890, Work: 823-5793, Fax: 823-5835

ELIGIBILITY:

- Only IEEE members with 3 years residency in the IEEE Orlando Section are eligible.
- Current members of the Section Executive Board are not eligible.
- Previous award recipients, even from other Sections, are not eligible for the same award.
- The candidate need not be a member of a Group or Society.

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Region 03 Council 05 Section 51

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Membership: Bob Smallwood, H-P
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PACE: H. Glenn Portz (Home) 644-2408

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(Bus.) 356-6914, (Home) 539-0465

Publications Manager: Jorge Medina, Sigtone
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Strategic Planning: Dave King, M.M.
(Bus.) 356-1836, (Home) 628-4462

Student Activities: Dr. Michael Harris*, UCF
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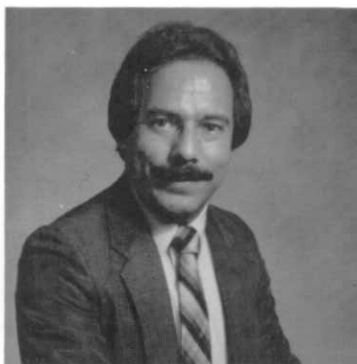
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UFFC: Brent Horine, Sawtek (Bus.) 886-8860

Student Branch: Chuck Fulks, UCF 277-0456*

*Fax: 823-5835, **Fax: 823-5419

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Jorge Medina, Section Chairman

Chairman's Corner

Our June Installation Banquet will once again bring about a change in guard for our Section. The new Section officers will be installed at the Annual Installation Banquet to be held on June 13th at the Park Avenue Grill in Winter Park. Please plan to join us at our next most important social occasion. We will also present the Outstanding Service Award, the Outstanding Corporate Service Award and the Outstanding Chapter Award at that time. Please call **Ali Atashroo** for reservations.

Last month I had the opportunity to attend the Region 3 and the FCIEEE Executive Committee meetings in Birmingham during the SouthEastCon '92. At the Awards Luncheon the Orlando Section, along with eight other Sections, were recognized as the Outstanding Region 3 Sections based on their success in carrying out the objectives of the Institute through implementation of section programs and support of Region 3 goals. The Section extends its appreciation to the **Student Section Branch** who put great effort, dedication and enthusiasm, in highly representing UCF at SouthEastCon '92 in the student paper contest and the student hardware contest.

I heartily encourage all members with over 5 years experience to apply for Senior membership. **Bob Smallwood** has Senior Member kits. The members of the Executive committee also have lists of Senior Members in the Orlando Section for you to choose from for the three references needed.

The Orlando Section is planning on organizing an IEEE Consultants Network. If you are interested in participating in this kind of activity please give me a call or get in touch with our new Strategic Plan-

ning Committee chairman, **David King**.

It is the responsibility of the Chapter Chairman to provide the leadership and organize Chapter activities and programs. If you have some ideas for activities or programs you would like to see, or perhaps organize, contact your Chapter Chairman. A list with telephone numbers appears in every issue of the Section Monthly.

On May 13th the Orlando Section will be celebrating its 33rd anniversary.

Our IEEE Orlando Section Executive Committee meetings are held the first Tuesday of every month except the month of July, at Hewlett-Packard, 6177 Lake Ellenor Drive, Orlando, at 5:30 P.M. There will be some light refreshments to tide you over until dinner. *Come join us!* ♦

Candidates for Orlando Section Officers Named

In accordance with the Section Bylaws, the following candidates for Section Officers for terms beginning July 1, 1992 and ending June 30, 1993, are as follows:

| | |
|----------------|-------------------------|
| Chairman: | Ali Atashroo |
| Vice Chairman: | Jacqueline Hines |
| Treasurer: | Parveen Wahid |
| Secretary: | Dave King |

Each person was contacted by the Nomination Committee and was found to be qualified and willing to serve. ♦

EMPLOYMENT ASSISTANCE

Employment assistance continues to be emphasized by the PACE Committee. Unemployed members are urged to contact **Glenn Portz**, PACE Committee Chairman, at 644-2408 for more information. The PACE committee has a library of information on:

- Career Development
 - Avoiding Obsolescence
 - Skills Assessment
 - Transition to Management
 - Retirement Planning
- Employment Issues
 - Hiring and Termination Practices
 - Discrimination, Age or Other
 - Legal Resources
- Legislative Agenda
 - Pensions
 - Technology Positions
 - Congressional Fellows
- Pre-college Education
 - Engineer's Week
 - Science Fairs
 - Student Conferences, e.g. S-PAC's
- Intellectual Property Rights
 - Patents
 - Software

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ORLANDO SECTION AWARD CANDIDATE SEARCH FORM

Return to:
 Madjid Belkerdid
 University of Central Florida
 EECS Dept.
 Orlando, FL 32816

1. AWARD: _____ Outstanding Engineer Award
 _____ Outstanding Engineering Educator Award
 _____ Outstanding Service Award

2. NOMINEE CANDIDATE:
 Name: _____
 Occupation/Position/Affiliation: _____

 Current Address _____

3. PROPOSED CITATION (30 words or less): For _____

4. IEEE SOCIETY/BOARD RELEVANT TO ACHIEVEMENT CITED: _____

5. SUBMITTED BY: _____
 Name: _____
 Occupation/Position/Affiliation: _____

 Current Address: _____

Phone: () _____

6. ARE YOU WILLING TO PREPARE THE NOMINATION FORMS YOURSELF? YES _____ NO _____
 IF YES, STOP HERE AND MAIL THIS FORM TO ABOVE ADDRESS. THE AWARD COMMITTEE **WILL** SEND YOU A COPY OF THE NOMINATION FORM. IF NO, PLEASE COMPLETE THE REST OF THIS FORM AND MAIL TO ABOVE ADDRESS

7. POTENTIAL ENDORSERS:
 (Persons familiar with nominee, who can probably attest to his/her contributions and to the importance thereof)

| A. Name | B. Name | C. Name |
|----------------|----------------|----------------|
| Position/Title | Position/Title | Position/Title |
| Address | Address | Address |
| City/zip | City/zip | City/zip |

BRIEF EVIDENCE TO SUPPORT NOMINATION :

8. SUGGESTED NOMINATOR(S) IF DIFFERENT FROM #5: _____

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IEEE ORLANDO SECTION - EVENTS CALENDAR

For the latest and/or additional information call the IEEE Voice Information Center (407) 260-1676

- | | |
|-----------|--|
| May 5 | IEEE Orlando Section - Executive Committee Meeting, Hewlett Packard, Jorge Medina (260-1676) |
| May 13 | IEEE Orlando Section - 33rd Anniversary! |
| May 16 | FCIEEE - Executive Committee Meeting, Holiday Inn at the Orlando Int'l Airport, Mark Dreadin (904/484-5615) |
| May 18 | COMP - General Meeting and Election of Chapter Officers for 1992-93, UCF, Sheau Lang (823-2474) |
| May 21 | SRC - Evolutionary Robotics: Neural Nets, Genetic Algorithms, and Insect Robots, UCF, M. Harris (823-2548) |
| May 26-29 | EIPB '92 - 1992 International Symposium on Electron, Ion and Photon Beams, Peabody Hotel, Orlando, Larry Thompson (908/582-2252) |
| Jun. 2 | IEEE Orlando Section - Executive Committee Meeting, Hewlett Packard, Jorge Medina (260-1676) |
| Jun. 13 | IEEE Orlando Section - Installation Banquet, Park Avenue Grill, Ali Atashroo (539-0465, 356-6914, 260-1676) |

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Volume XXV

June 1992

Number 11

The Orlando Section of the Institute of Electrical and Electronics Engineers Announces the

1992 Installation Banquet

Saturday, June 13, 1992

Park Avenue Grill

358 North Park Avenue, Winter Park, Florida 32789

Program:

6:30 P.M.- 7:15 P.M. Cash Bar, Hors d'oeuvres

7:00 P.M. Dinner

*Prime Rib, Fresh Grouper or Hawaiian Chicken
(vegetarian available upon request)*

8:00 P.M.- 8:45 P.M.

Guest Speaker: Dr. Harold Cates

VP of Martin Marietta Technical Operations

Presentation of Awards:

Certificates of Appreciation

Outstanding Chapter Award

Outstanding Service Award

Installation of the 1992-1993 Executive Committee

*This is an excellent opportunity to meet other members of the Orlando engineering community.
For reservations or additional details please contact Dr. Ali Atashroo, 826-1354 or 539-0465.*

Reservation Form

Please make _____ reservations for the IEEE 1992 Annual Installation banquet. My check for _____ (\$16.00 each) is enclosed.
Make check payable to IEEE. Choice of Entree: Prime Rib Fresh Grouper Hawaiian Chicken Vegetarian

Mail to: IEEE Installation Banquet
c/o Dr. Ali Atashroo
1512 Indian Dance Court
Maitland, Florida 32751
(407) 826-1354/539-0465

Name/Phone No.: _____

Guest Name: _____

Company Affiliation: _____

Reservations must be received no later than Tuesday, June 9, 1992.

IEEE ORLANDO SECTION

Region 03 Council 05 Section 51

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Sr. Past Chair.: Dr. Gene K. Huddleston, M.M.
(Bus.) 356-7201, (Home) 339-0336

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PE/IA: Tim Turba (Home) 264-2578, OUC
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SP: Dave King, M.M.
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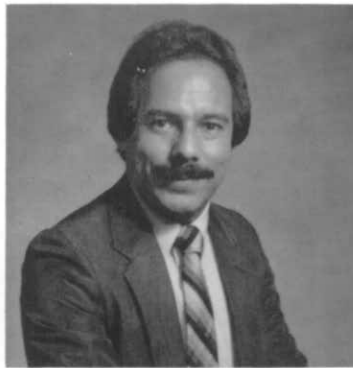
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(Bus.) 823-2548, (Home) 366-1214

UFFC: Brent Horine, Sawtek (Bus.) 886-8860

Student Branch: Chuck Fulks, UCF 277-0456*

*Fax: 823-5835, **Fax: 823-5419

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Jorge Medina, Section Chairman

Chairman's Corner

This will be my last Chairman's Corner for the year as the new officers will be introduced at the Installation Banquet on June 13th. This has been a most rewarding and challenging year and it has been a pleasure serving the Orlando Section. I would like to thank all of the members who have participated in promoting and enhancing our profession through the IEEE Orlando Section and especially the Executive Committee for their support and guidance. It is a pleasure to be associated with professionals of such high caliber. And we all want to thank **Hewlett Packard** for hosting our meetings this past year at their fine facility.

A new slate of officers has been elected. **Ali Atashroo, Jackie Hines, Parveen Wahid** and **Dave King** are the respective Section Chairman, Vice Chairman, Treasurer and Secretary. They, along with the elected Chapter officers, will be installed at the Installation Banquet. The Installation Banquet will be held at the Park Avenue Grill in Winter Park, Saturday, June 13th, 1992. Call **Ali Atashroo** for more information and reservations.

I would like to reflect on what we have accomplished this past year.

We have continued promoting the use of the **Voice Information Center** (260-1676) as another means to provide timely notice of meetings and other Chapter and Section activities. I will continue to promote this electronic communications system in the months to come.

The Chapters have had a very active year and their Chairmen should be commended. The chapters need to pursue more actively support from national and from our local industries in the coming year. We have ten Chapters and we are in the process of creating a Neural Network

"Working Group" under the leadership of **Michael Georgiopoulos**. The Student Branch now has a Computer and a SRC Student Chapters. Emphasis next year should be continued to promote active chapter operations.

The Section hosted the highly successful Family Fun Day in October, an Awards Banquet in March and will host the Installation Banquet on June. Our hat is off to **Ali Atashroo** for serving in the dual role of Vice Chairman and Program Chairman.

Of particular note is the success of the Awards Committee under **Madjid Belkerdid** in ensuring the Section is properly recognized for its achievements. The Orlando Section earned one of the Region 3 Exemplary Section Awards. Without the efforts of the Awards Committee, this deserved recognition would not have happened.

The Section is as healthy as it's ever been, and next year promises to be even more fruitful than this past one. As of May 5th, 1992 the Section's checking account balance was \$6,710.95 and it's certificate of deposit \$27,179.42. This excellent financial status of the Section is a result of plans and actions by the Executive Committee over the past few years and are certainly not to be credited solely to this year's leadership. The Executive Committee must continue to take a proactive stance in the years to come to maintain the momentum and to ensure that we do not find ourselves operating in a deficit mode. The future of our Section is in running and sponsoring more technical conferences. Areas that require emphasis in the coming year include educational activities, promotion to Senior and Fellow grades.

A Video Library was created with over twenty five technical videos and a Job/Career Fair was co-sponsored in May.

The next meeting of the Executive Committee will be on June 2nd at Hewlett Packard. Each Chapter Chairman will be expected to present the highlights and statistics of their operations during the July '91 - June '92 time frame so that the winner of the Best Chapter Award can be voted on by the Chapter Chairmen. The award will be presented at the Installation Banquet on June 13th. The new Section officers will also receive the records and other data from the outgoing officers on June 2nd.

Please note the June 13th Installation Banquet to which all members and spouses are invited. There will be a good opportunity to socialize, have a good dinner and hear an interesting speaker. I hope to see you all there!

OUTSTANDING CHAPTER CHAIRMAN AWARD

It is final report time. Each Chapter Chairman is asked to prepare and submit a report of his/her chapter activities covering the period July 1991 through June 1992. To make your reports timely and of use in selecting the Outstanding Chapter Chairman, please adhere to the following schedule:

June 2 - Attend the Executive Committee meeting and submit the following items:

1. Final written report of chapter activities, including summary report submitted earlier, names and addresses of new chapter officers, budget data and a narrative summary.
2. Oral report of activities (5 minutes)
3. Your vote for the best chapter award as based on the activity reports and other criteria.
4. Any and all meeting reports (Form L-31) not yet submitted.

Please compute the activity index for your chapter for each meeting and total the results for the year. A description of the Chapter Activity Index Formula is shown below.

$$AI = \frac{\sum_{i=1}^N (ai \times Ai/M)}{N}$$

- N = Total number of Meetings
- ai = 0.5 social meeting
1.0 professional meeting
1.5 technical meeting
- Ai = Total attendance, including non-members
- M = Total number of chapter members

The Outstanding Chapter Chairman Award will be presented at the IEEE Orlando Section Installation Banquet on June 13, 1992.

IEEE ORLANDO SECTION VIDEO LIBRARY

Twenty seven videoconference materials are available to IEEE Orlando Section Chapters. These are selected programs from IEEE's ongoing Seminars via Satellite series on timely engineering topics. Each video runs several hours and would be suitable for a day long program. For more information or to borrow any of these videos please contact Dr. Kalpathy Sundaram.

IEEE ORLANDO SECTION VIDEO LIBRARY EDUCATION COMMITTEE

c/o Dr. Kalpathy Sundaram
University of Central Florida
Dept. of Electrical Engineering
Orlando, FL 32816

Work: 407-823-5326, Home: 407-671-6843, Fax: 407-823-5835

MEETING ANNOUNCEMENTS

SIGNAL PROCESSING (SP)

Digital Signal Processing: Methods and Applications

- Speaker:** Dr. Y.A. Alsaka
- Date:** Wednesday, June 17th, 1992
- Time:** 5:30 P.M.
- Place:** UCF Room 122
- Contact:** Dave King (356-6573 or 628-4462). Election will be held and pizza will be served.

SYSTEMS, ROBOTICS AND CONTROLS (SRC)

General Meeting and Election of Chapter Officers

- Date:** Monday, June 8th, 1992
- Time:** 6 P.M.
- Place:** UCF Engineering Building, Room 288
- Contact:** Harley Myler (823-5098) or Michael Harris (823-2548). Reservations will be served.

THE STRATEGIC PLANNING COMMITTEE

by Dave King

The purpose of the strategic planning committee is to formulate and suggest ideas and plans for the application of the IEEE Orlando Section resources for medium and long range. As most of you are aware, our Section has acquired some funds through the sponsorship of the recent COM/VT convention. We are also about to acquire more funds through sponsorship of the GlobeCom '92 convention this year. It is the charter of the strategic planning committee to come up with ways to apply these resources for the betterment of the IEEE, our membership and the community at large. To date many ideas have been suggested and we have started to discuss the application of these ideas. We would like to solicit recommendations from the membership in this regard. Some of the ideas that have been presented to date are:

- Sponsor an IEEE workshop on *Alternatives to Corporate employment*.
- Establish a scholarship fund.
- Hold an annual contest for high school students.
- Move our meeting place to a more central location.
- Publish a Section membership directory.
- Sponsor a regular video tape tutorial series.

If you would like to make a suggestion or comment on the suggestions that have already been made, please call 356-6573 or 628-4462, or write to me. We welcome your input.

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IEEE ORLANDO SECTION EVENTS CALENDAR

For the latest and/or additional information call the IEEE Voice Information Center (407) 260-1676

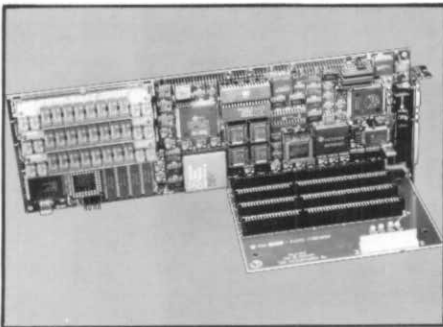
- Jun. 2** IEEE Orlando Section - *Executive Committee Meeting*, Hewlett Packard, Jorge Medina (260-1676)
- Jun.8** SRC - *General Meeting and Election of Chapter Officers*, UCF, Harley Myler (823-5098) or Michael. Harris (823-2548)
- Jun. 13** IEEE Orlando Section - *Installation Banquet*, Park Avenue Grill, Ali Atashroo (539-0465, 356-6914 , 260-1676)
- Jun.17** SP- *Digital Signal Processing: Methods and Applications*, UCF, Dave King (356-6573 or 628-4462)
- Aug. 4** IEEE Orlando Section - *Executive Committee Meeting*, Hewlett Packard, Ali Atashroo (826-1354 or 539-0465)

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The Orlando Section of the IEEE encourages placement of technical, professional, promotional, and commercial advertisement in the *Monthly*. The *Monthly*, read by more than 1,400 members and over 100 key area industries, is published 11 times a year, August through June. The due date for the receipt of the camera ready ad and payment is the **1st Tuesday** of the month preceding the month of publication.

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