

AUGUST 1986

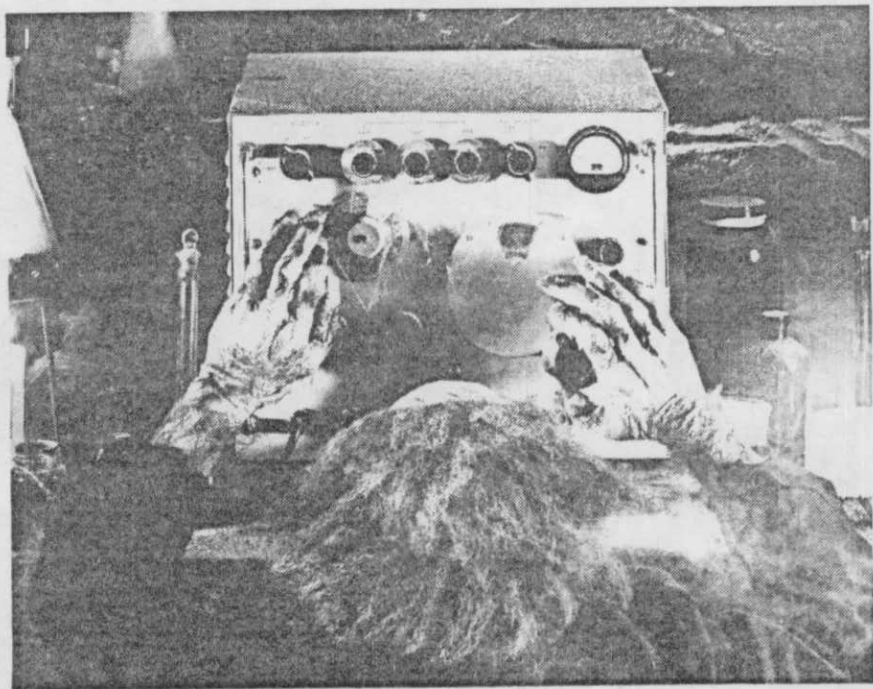
The

ORLANDO SECTION MONTHLY

VOLUME XXI
NUMBER 1

CIRCULATION 1250

IEEE



***GET READY FOR
CHANGES IN THE
ORLANDO SECTION
NOTES !!***

**OUTSTANDING SERVICE AWARD FOR 1986
FRANK FLUET**

This year's Orlando Section Outstanding Service Award was presented to Frank Fluet at the June Installation Banquet. Frank was cited for his contributions as Chairman of the Conference Committee and the Publications Committee; in addition to his past contributions to the Section which included service as the 1984-85 Orlando Section Chairman. Frank is continuing his service to the Section and is this year's Awards Committee Chairman. Frank is currently a Fellow Engineer at Gould, Inc. of Orlando.

**OUTSTANDING CHAPTER'S CHAIRMAN AWARD FOR 1986
GENE KEITH HUDDLESTON, AP/MTT SOCIETIES**

This year's Orlando Section Outstanding Chapter's Chairman Award was presented to Dr. Keith Huddleston, AP/MTT Chairman. Keith did an outstanding job in organization of his chapter, scheduling of speakers (which included the IEEE Distinguished Lecturers), the presentation of \$500 to the IEEE Student Branch and the raising of \$850 from IEEE national chapters in support of our local activities. Keith will serve this year on the Executive Board as Chapters Chairman where he will help all the Orlando chapters with his experience and expertise. Keith is an Engineering Manager at Martin Marietta Aerospace, Orlando.

**CHANGING OF THE GUARD IN THE
ELECTRICAL ENGINEERING & COMMUNICATION SCIENCE
DEPARTMENT AT THE UNIVERSITY OF CENTRAL FLORIDA**

The Orlando Section welcomes Dr. Nick Tzannes who will be assuming the EECS Department Chairman position at the University of Central Florida. Nick will begin his job on August 6th after spending his summer in Greece working for NATO. Dr. Tzannes has taught and done research in the area of communications at several universities in the US and was a Chaired-Professor in Greece prior to joining the University of Virginia where he was a professor for the past two years. Nick brings a wealth of experience to the Chairman's position and we wish him well in his new and challenging assignment.

Dr. Robert Walker will be moving back into the EECS faculty at UCF after serving as Department Chairman for the past three years. While Chairman, Bob successfully recruited several new faculty, increased the department's research activities and helped increase the IEEE student membership. He is noted by the students for his genuine concern for their problems and unselfish counseling. Bob will resume his teaching activities in the electronics area and continue his service to the department. Dr. Walker is a Senior Member of the IEEE and is active in the Brevard Section where he has residence.

**NEW ORLANDO CHAPTER BEING CONSIDERED,
ACOUSTIC, SPEECH & SIGNAL PROCESSING CHAPTER**

Establishment of a chapter of ASSP in the Orlando Section is being considered. All ASSP Society members are needed for help in establishing this new chapter by signing an IEEE Society Chapter petition. Contact Yacoub (Jake) Alsaka, UCF, at 281-5768 or 275-2786.

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Bill Wade, Senior Systems Engineer

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MEETING ANNOUNCEMENT...

ULTRASONIC, FERROELECTRIC & FREQUENCY CONTROL SOCIETY

Topic: Surface Acoustic Wave Filter Modeling and Design

Speaker: D.C. Malocha, Associate Professor

Date & Time: Monday, September 15th, 1986 - 6:00 pm

Place: SAWTEK, Inc., Orange Blossom Trail, Apopka, Florida

(approximately two miles south of Apopka on Rt. 441 on west side of road)

For further information contact: Sunder Gopani, 886-8860

Other: Refreshments will be served

Abstract: This talk will present the models and design principals of non-dispersive SAW filters. The emphasis will be placed on intuitive arguments as to the derivation of the models and the need for various levels of complexity for analysis. CAD techniques developed at UCF will be presented and comparison of theory and measured devices will be discussed.

About the Author: Dr. Malocha is an Associate Professor in the Electrical Engineering Dept. at UCF and group leader of the Solid State Devices & Systems Laboratory. His current interests are in SAW technology, solid state devices, CAD techniques and communication systems.

Dr. Malocha is a senior member of the IEEE and a member of Eta Kappa Nu, Tau Beta Pi and the American Vacuum Society. He currently holds three patents.

The next IEEE EXECUTIVE COMMITTEE MEETING will be on Tuesday, August 5th at 5:30 pm. The meeting will be held at the Orlando Public Library in the Cypress Room, third floor.

SECTION ANNOUNCEMENTS...

ORLANDO MTT SECTION RECEIVES AWARD FROM MTT NATIONAL

The Orlando MTT Section received a service award for having the largest percentage increase in membership of all the Microwave Theory & Techniques Society Chapters in the U.S. A plaque was presented to Dr. Keith Huddleston, 1985-86 MTT/AP Orlando Chapter Chairman at the 1986 MTT International Symposium in Baltimore, Maryland.

IEEE ORLANDO SECTION LIFE SENIOR MEMBER PASSES

Robert L. Batts, 79, 13 Todd Way, Tavares, died Saturday, June 14th. Mr. Batts built the world's first successful police car radio system for the Detroit Police Department in 1928. He spent 22 years directing police and fire communications in Indianapolis where he installed the first police motorcycle radio in 1931 and built the first two-way police car radio in 1934. He moved to Tavares in 1974 and was a retired Director of Product Services for Motorola.

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CHAIRMAN'S CORNER

August 1986

It is my pleasure to serve the Orlando IEEE Section as Chairman this year. As an introduction, I am currently an Associate Professor in the Electrical Engineering & Communication Sciences Department at the University of Central Florida and I am a Senior Member of the IEEE. The Orlando Section is one of the most active and dynamic Sections in the state and it is hoped that it will increase its activities and service to its members this year. The Section currently serves over 1000 regular members and approximately 150 student members.

I would like to welcome all the new Executive Committee members who have volunteered to serve this year. I believe this year's committee, as in the past, consists of outstanding individuals who wish to serve their profession. The Executive Committee is currently forming this year's plans and schedules and anyone wishing to aid in any area or offer suggestions is encouraged to contact the appropriate member.

This year the Orlando Section is pursuing a very challenging and exciting project. In an attempt to reduce our cost of publication and to increase our funds available to the various chapters and special projects, we have engaged the services of T.T. Publications in Longwood to produce our Section Notes. This month's Notes are their first publication for the Orlando Section. Further, you will soon be receiving a quarterly publication which will have a broader base of information and announcements and will be of a different format than our Monthly Notes. We intend these publications to be interesting and informative to you on relevant subjects in our local area. It is the intent for the publications to be monetarily self sustaining via advertisements and anyone who has ideas or potential advertisers should contact: Grace Hawkins, T.T. Publications, 282 Short St., Longwood, FL 32750, (260-0712).

I would strongly encourage all members to become involved and participate in IEEE activities. The Section is here for service to you. This year we will have a number of the IEEE Distinguished Lecturers from the various societies to speak in Orlando. These gentlemen are recognized as outstanding in their field and their talks are always informative, interesting and well presented. In addition, several other programs are being planned which should be of interest to everyone, even your spouses. Get involved for your own benefit; meet fellow engineers from other companies, learn of new technology, hear of local potential job opportunities and benefit from a professional interaction.

Donald C. Malocha

Chairman, IEEE Orlando Section

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Chapter's Chairman...	Keith Huddleston	(Bus.) 356-7201	(Home) 339-0336

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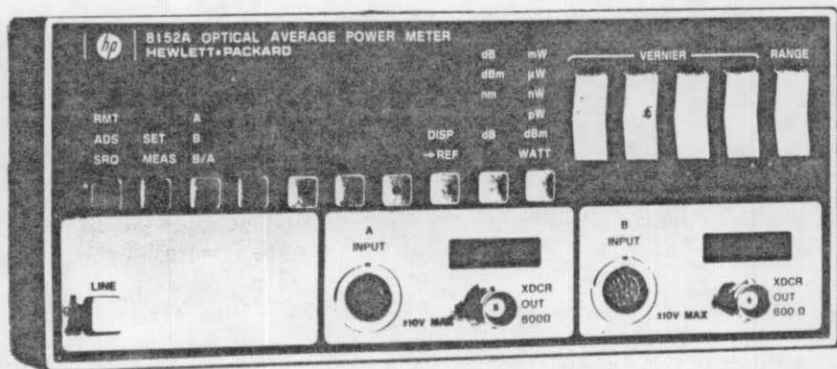
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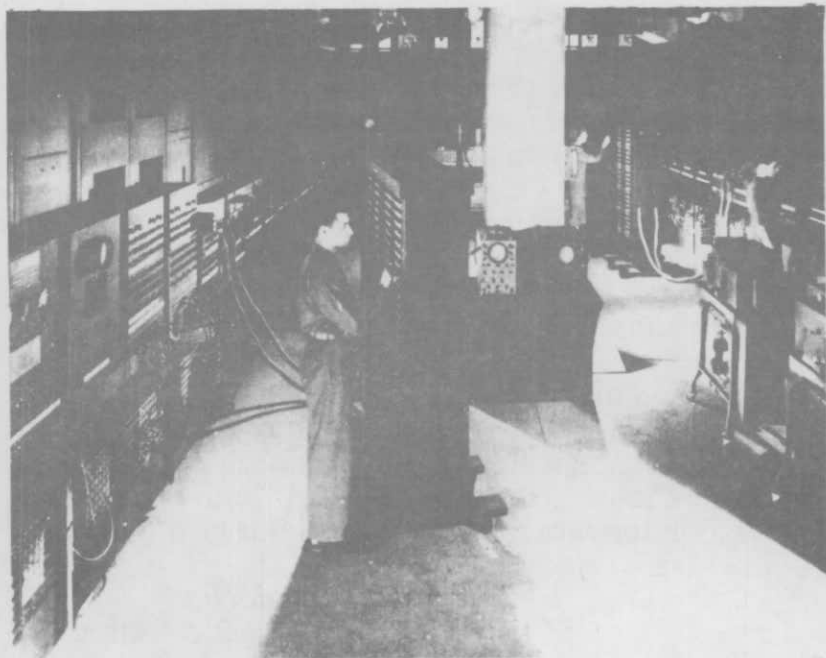
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February 1986 marked the 40th birthday of the Electronic Numerical Integrator and Computer (ENIAC), which began operation at the University of Pennsylvania on February 14, 1946. ENIAC, the world's first all-electronic, large-scale, general-purpose digital computer, filled a 30 by 50 foot room, weighed 30 tons, required 18,000 electronic tubes, and included within its circuits 500,000 soldered joints, 70,000 resistors and 10,000 capacitors. It could do computations a thousand times faster than anything then in existence. Today its computing performance couldn't keep up with a quarter-inch microprocessor chip.

CHAIRMAN'S CORNER

I would like to welcome all new members to the Orlando IEEE Section who have moved into our area. Please let any member of the Executive Committee know if they may be of service. All members are welcome to attend all of the IEEE sponsored activities. These include the Executive Board meetings, Section and Chapter meetings. You need not be a member of any Chapter to attend individual Chapter meetings; so please attend if you have an interest in any of this year's technical meetings.

As announced, in October you will be receiving the premier issue of the Orlando Section Quarterly. The Quarterly will provide a wider range of local activities which we hope will be of interest to our members. Anyone who wishes to become involved or contribute articles to the Quarterly can contact me by phone or write to the IEEE address on the Notes.

This year the Orlando Section will attempt to nominate a greater number of our members for local, state and national awards. Nominations can be made by anyone for any IEEE Section member. Members can also nominate themselves. The Award's Chairman will provide further information in the October Quarterly; be prepared to nominate yourself or one of your colleagues.

There will be a full calendar of technical meetings held by our Chapters this year. If you have any ideas or wish to contribute in any way, contact Keith Huddleston.

I look forward to seeing you at our next meeting.

Donald C. Malocha
Chairman, IEEE Orlando section

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CHAPTER ACTIVITIES

G. K Huddleston

Your Chapter Chairmen have been busy during August with planning, organizing and staffing for next year's activities. I have been trying to help ensure that they receive the fullest support from the Section in carrying out these important preliminary activities.

Each of our seven Chapters is planning to schedule nine monthly meetings during September 1986 through May 1987. Local and out-of-town speakers will be invited. The assistance of the members is requested in suggesting and inviting speakers, in helping to locate suitable meeting places, and in identifying sponsors for the meetings to help defray the cost of refreshments. Please contact your Chapter Chairman with your suggestions or help.

It is of particular importance that all four officer positions are filled in each chapter. Please respond positively to your Chairman's invitation to serve the membership as an officer. Such service will provide an opportunity for professional growth and to become better known in your profession. And you will be able to influence how your Chapter is run.

Members of each Chapter are invited to support the Chapter activities that are being planned and provided for their benefit. Your officers will be sending out program schedules and invitations for your support and participation. Please attend the monthly meetings, enjoy the professional fellowship and thereby get a direct return on your IEEE dues and rather sizeable regional assessment!

For the IEEE members who do not belong to any of the seven Orlando Chapters, there will be monthly meetings of the Orlando Section. The Section meetings will be held jointly with the Chapters, the first being with the Orlando Chapter of the Microwave Theory and Techniques/Antennas and Propagation Society on September 25 which features a MTT National Lecturer*. Other joint meetings will be coordinated to produce a really superb program for the Section members who would otherwise be left out.

The Awards Banquet and Installation Banquet will be held next Spring as part of the Section program of activities. All members are invited to participate in these rather pleasant social affairs, and efforts will be made to encourage a record attendance. Please plan now to be part of the fun, maybe win an award, and meet the new officers.

There are those among us who believe that there is gold in Central Florida -- high tech gold. The Orlando Section and its seven Chapters are carrying out mining operations to help ensure that this valuable resource is made available to the IEEE members in ways other than those found on the job. We heartily invite you to join your colleagues and pan for your share of that gold.

Please support your local chapter!

* Date: September 25th, 1986

Time: 5:30 pm

Place: Hewlett Packard, 6177 Lake Ellenor Drive

Speaker: Dr. John Biyant

Topic: 1st Century of Microwaves 1886 - 1986

Contact Bob Smallwood, 859-2900, for further information.

MEETING ANNOUNCEMENTS...

ULTRASONIC, FERROELECTRIC & FREQUENCY CONTROL SOCIETY

Topic: Surface Acoustic Wave Filter Modeling and Design

Speaker: D.C. Malocha, Associate Professor

Date & Time: Monday, September 15th, 1986 - 6:00 pm

Place: SAWTEK, Inc., Orange Blossom Trail, Apopka, Florida

(approximately two miles south of Apopka on Rt. 441 on west side of road)

For further information contact: Sunder Gopani, 886-8860

Other: Refreshments will be served

Abstract: This talk will present the models and design principals of non-dispersive SAW filters. The emphasis will be placed on intuitive arguments as to the derivation of the models and the need for various levels of complexity for analysis. CAD techniques developed at UCF will be presented and comparison of theory and measured devices will be discussed.

About the Author: Dr. Malocha is an Associate Professor in the Electrical Engineering Dept. at UCF and group leader of the Solid State Devices & Systems Laboratory. His current interests are in SAW technology, solid state devices, CAD techniques and communication systems.

Dr. Malocha is a senior member of the IEEE and a member of Eta Kappa Nu, Tau Beta Pi and the American Vacuum Society. He currently holds three patents.

The next **IEEE EXECUTIVE COMMITTEE MEETING** will be on Tuesday, September 2nd at 5:30 pm. The meeting will be held at the Orlando Public Library in the Cypress Room, third floor.

Communication/Vehicular Technology Society Meeting

A Meeting was held on July 7th, 1986 at UCF. The speaker was Mr. Steve Powers, Principal Engineer in the Advanced Programs Division of HARRIS Corporation, Melbourne, Florida. The topic was anti jam and spread spectrum communications. Thirty-one people representing COMTECH, MARTIN MARIETTA, UCF, SAWTEK, REPCO, LOCKHEED and HARRIS CORPORATION were present.

IEEE Student Branch

BBQ & POOL PARTY

TO: Welcome new Department Chairman and returning students

DATE: September 5th, 1986

TIME: 2:00 pm - 5:00 pm

PLACE: Pavilion by UCF pool.

Dr. Nick Tzannes, the new EECS Department Chairman will be there.

Tour of Martin Marietta/Alafaya Trail Plant

On October 2nd, 1986 there will be a special tour of the Alafaya Trail Martin Marietta Plant. We will meet at 2:00 pm at C.E.B.A. 416. Transportation will be provided. Anyone interested in attending must sign up in the EE office by September 5th. For more information contact Dr. Harris at 275-2540.

OCTOBER 1986

The

ORLANDO SECTION MONTHLY

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CIRCULATION 1250

IEEE



**The IEEE Orlando Section
is planning a
NOISE FIGURE SEMINAR
at the Omni International Hotel
in Orlando, Florida
Monday, November 10th, 1986**

Details and Registration Form Inside

CHAIRMAN'S CORNER

OCTOBER 1986

At the end of October you will be receiving the first issue of the IEEE Orlando Section Quarterly. Since you have taken time to read this column, I would encourage you to read the Quarterly and give us your feedback, good or bad and reply by phone, letter or carrier pigeon. The people who are contributing to this effort are eager to hear your response. We expect the Quarterly to evolve this year, therefore, you can have a real impact with your comments and suggestions.

I have heard, on occasion, that the IEEE is not responsive to the needs or concerns of the average engineer. It's difficult to say what an average EE is, however, I'm sure that there is always some validity in the statement. I would hasten to say that the IEEE is composed of all engineers who can qualify for admission which include the average and those who vary from the mean and that the officers are all volunteers who have an interest in their profession. Therefore, in you have a desire to serve your profession or if you want change, *get involved!* Don't be an armchair quarterback (or engineer); the Orlando Section welcomes your help.

Although we are one of the largest professional organizations in the world, we still have only a portion of those people who qualify for membership in the IEEE. After leaving school, it is very difficult to find people who might be interested in joining the IEEE in the Orlando Section. I believe the Orlando Section provides value for the time and effort members spend to come to our technical, professional and social meetings. Mention the benefits you obtain from the IEEE Orlando Section to your colleagues. Let's not make the IEEE Orlando's best kept secret. Talk it up!

I hope to see you at one of our next IEEE functions.

Donald C. Malocha

Chairman, IEEE Orlando Section

**FOC/LAN '86 The Tenth Annual International Fiber Optic
Communications and Local Area Networks Exposition**
October 8-10, 1986, Orange County Civic Center, Orlando, Florida

The next **IEEE EXECUTIVE COMMITTEE MEETING** will be on Tuesday, October 7 at 5:30 pm. The meeting will be held at the Orlando Public Library in the Cypress Room, third floor.

EXECUTIVE BOARD

Chairman.....	Donald C. Malocha	(Bus.) 275-2414	(Home) 862-5693
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Chapter's Chairman...	Keith Huddleston	(Bus.) 356-7201	(Home) 339-0336

MEETING ANNOUNCEMENTS

IEEE COMPUTER SOCIETY CHAPTER ORLANDO SECTION *Student Paper Contest*

October 3, 1986 Student Paper Title: "Making Computers User-Friendly: Current Features and Future Possibilities"

Entries to the contest to be received by UCF Dept. of Computer Science. Contest open to all UCF students except IEEE officers. Papers are limited to 3000 words, double-spaced and typed.

November 3, 1986 Student Paper Contest. All student papers due at UCF Dept. of Computer Science.

December 4, 1986 Student Paper Contest Award and Presentation. University of Central Florida Room # TBD. Time: TBD.

Orlando Public Library 6:00 pm - 8:00 pm

COMPUTER SOCIETY SEMINAR ANNOUNCEMENT

Topic: VRTX - Versatile Real - Time Executive Operating System.

Speaker: Mr. David Howard, Field Applications Manager, Hunter & Ready.

Date: October 9, 1986

Time: 8:00 am - 12:00 pm

Place: University of Central Florida Old Engineering Building, Room EN 360

Point of Contact: For more information, contact Jorge Medina 834-9600, Steve Forsythe 244-1166 or Dr. H.N. Srinidhi 275-2637.

Other: Coffee and donuts will be served.

Admission: None. All members, students and industrial reps are invited.

Abstract: VRTX, the Versatile Real-Time Executive, is a silicon software component that provides operating system capabilities for an embedded computer application. There are VRTX implementations designed for 16/32-bit microprocessors. In this technical seminar applications will be demonstrated illustrating the many key features in designing embedded microprocessor applications.

ELECTRON DEVICE AND COMPONENTS, HYBRIDS & MANUFACTURING TECHNOLOGY SOCIETIES

Title: Simulating, predicting and controlling the effects of transmission line impedance for very high speed VLSI packaging.

Program: As the speed of VLSI circuits increases more emphasis is being placed on the impedance matching of interconnections between packages. This problem becomes ever more complex as the pin count of each package increases to over 100 pins. Presented are results of two separate studies relating to these issues.

Speaker: Robert Canright, Staff Engineer. Martin Marietta Aerospace Corp. Orlando, Florida.

Date: Thursday, October 30, 1986. Time: 6:00 - 7:30 pm

Place: Downtown Orlando Public Library. Cypress Room 3rd floor. Community Relations Area, E. Central & Rosalind, Orlando Florida.

Point of Contact: All members and industrial representatives are invited. For more information contact Hal Brown, 281-5795 or 788-8629.

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**COMMUNICATION & VEHICULAR TECHNOLOGY
MEETING NOTICE**

DATE: Wednesday, October 15, 1986 TIME: 6:00 pm
PLACE: SAWTEK, INC., Orange Blossom Trail, Apopka, FL.
(approximately two miles south of Apopka on Rt. 441 on west side of road)
FOR MORE INFORMATION: Contact M.A. Belkerdid at 275-2324
OTHER: Tour of facilities is planned after the presentation.

TITLE: Improvements in Accuracy of SAW Stabilized Oscillators.

ABSTRACT: The utilization of SAW oscillators has been growing dramatically over the last several years. Simplicity of system design is the primary reason for this growth. SAW stabilized oscillators reduce the need for multiplier stages, which improves the phase noise, short term stability, and minimizes subharmonic content. SAW oscillators also have increased reliability, reduced power consumption and reduced package size.

The increased utilization of RF & microwave communications in the last few years has created the need for more precise frequency control for all types of frequency sources. This need has driven the development of more accurate SAW frequency sources. The purpose of this paper is to discuss the basic design criteria for SAW oscillators, and how these criteria can impact specific performance parameters. The primary focus will be on temperature compensated SAW oscillators (TCISO), often required for local oscillators, and voltage controlled SAW oscillators (VCISO), which may be used in phase lock loop applications. Performance and application data, as well as typical specifications for these products will be presented.

About the Author: Mr. Mike Lewis is the Manager of SAW oscillator products at SAWTEK, Inc. He received a BSEE from the University of Hawaii in 1972, and took advanced electrical engineering courses at North Eastern University in 1980 - 81. Mr. Lewis is responsible for design and development for SAW oscillator products, and he manages the technical staff working on these products. Mike has spent the last six of his twelve years in the electronic industry working in the crystal and crystal controlled oscillator products area. Prior to joining SAWTEK in 1985, Mike was manager of engineering at Murata Ery North America in Carlisle, PA.

NOISE FIGURE SEMINAR registration form

The fee for the Seminar is \$150.00 per person. The Omni will make available a number of rooms at the price of \$65.00 per night. This is a special rate for the IEEE and is significantly less than their normal rate.

NAME _____ TITLE _____

ADDRESS(City, State, Zip) _____

AFFILIATION _____ Phone _____

For hotel reservations call the OMNI International Hotel at (305) 843-6664. Ask for the IEEE Rate for your room reservation. The deadline for Seminar reservations is November 1st, 1986.

Clip out and mail with your check to: IEEE, P.O. Box 2020, Longwood, FL 32750

Noise Figure Seminar

The Seminar will begin at 8:00 am and will conclude at 5:00 pm. Luncheon will be served and there will be breaks for coffee.

Some subjects to be covered are:

- Importance of Noise in Receiving Systems
- Why Noise Figure?
- Noise: Descriptions and Origins in Receivers/Amplifiers
- Thermal Noise and Phase Noise
- Noise Figure/Effective Input Noise Temperature
- Y-Factor, Excess Noise Ratio (ENR)
- Second Stage Noise
- Noise Generators, Manual IF Series Substitution
- Direct Reading IF Instrumentation
- The Digital Machines

In addition, the subject of Noise Measurement up to 50GHZ will be discussed...as well as Demonstrations of the Latest Noise Instrumentation.

Dr. Don Malocha and Dr. Madjid Belkerdid, University of Central Florida will present theory and applications of Noise. Our Special Guest Speaker, Mr. William Pastori, of the Electronic Instrumentation Division of Eaton Corporation, Los Angeles, California, has written numerous papers on the subject of Noise ...in addition to designing several generations of Noise Instrumentation. His latest paper is in the August 1986 issue of MSN and is entitled, "Technique Simplifies Noise-Figure Measurement at 44GHZ".

Attendance will be limited to the first 100 people who place their reservations. Please see the reverse side for reservation and cost information.

NOVEMBER 1986

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IEEE

A Simple Beginning Spawned the Electronics Revolution



First Transistor
Bell Laboratories
1947

CHAIRMAN'S CORNER NOVEMBER 1986



The time is fast approaching for nominations of outstanding EE's in our local area. Nominations from each of our local chapters are encouraged. Therefore, if you know of an outstanding colleague whom you feel should be recognized for his contributions, notify our Awards Chairman, Frank Fluet (849-1131) and he will provide you with further information. The award nomination process is simple and requires a minimum amount of time and effort but is a valued service you could offer to a fellow professional.

You should have received the first issue of the Orlando Section Quarterly. We are encouraging feedback from our members as we evolve this publication. If you have any thoughts as to ways and means to provide increased service to our members, please write or call.

I encourage you to post or circulate the Orlando Section publications. Unless otherwise stated, anyone is invited to attend our meetings if they find the topic of interest. In closing, look at the engineers near you and consider if they may be eligible for award recognition. They may be doing the same when looking at you!

Donald C. Malocha
Orlando Section Chairman

The Next IEEE Executive Committee Meeting will be on Tuesday, November 4 at 5:30 pm. The meeting will be held at the Orlando Public Library in the Cypress Room, third floor.

EXECUTIVE BOARD

Chairman.....	Donald C. Malocha	(Bus.) 275-2414	(Home) 862-5693
Vice-Chairman.....	Geoffery Dick	(Bus.) 356-7752	(Home) 678-0
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Treasurer.....	Madjid A. Belkerdid	(Bus.) 275-2324	(Home) 699-4890
Chapter's Chairman ..	Keith Huddleston	(Bus.) 356-7201	(Home) 339-0336

THE INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS, INC.

ORLANDO SECTION AWARD CANDIDATE SEARCH FORM

IEEE Awards Committee 96 Sweetbriar Branch Longwood, FL 32750

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/YEAR ACHIEVEMENT/IMPORTANCE:

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



STAR SEARCH



Help us identify the outstanding Electrical Engineers in the Orlando Section!

We are looking for potential candidates for major Section Awards. The "Outstanding Engineer Award" and the "Outstanding Engineering Educator Award" will be presented in February, 1987 and the "Outstanding Service Award" will be given in June, 1987.

The Orlando Section consists of over 1200 Engineers spread over five counties. We can only get to know who the top performers are with your help. An "Orlando Section Award Candidate Search Form" can be found on the reverse side of this page. If you are aware of someone who has made significant contributions to profession in the areas specified in the "Qualifications" section, and also meets the "Eligibility" requirements, please take a couple of minutes to fill out the short "Search" form.

All Search forms received by the Awards Committee will be acknowledged by return mail. In the event a candidate is selected for nomination for a particular award, a Nomination form must then be filled out for the candidate, as indicated in "Procedure" section.

Frank Fluet, Awards Committee Chairman

INSTRUCTIONS

ORLANDO SECTION AWARD CANDIDATE SEARCH FORM

1.1 PURPOSE

To encourage and facilitate the identification of potential candidates for Orlando Section Awards by providing a simple avenue for preliminary consideration by the Awards Committee.

1.2 PROCEDURE

The Submitter fills out the form as indicated and suggests nominators and endorsers to support the nomination. After a review process, some candidates will be selected for nomination. If the Submitter is willing to prepare the nominations forms, the Awards Committee will provide the necessary materials by return mail. If not, the committee will attempt to locate a suitable Nominator. (The members of the Awards Committee are not permitted to nominate or endorse any candidates).

1.3 SUPPLEMENTARY INSTRUCTIONS

CITATION: The Citation should reflect the award criteria (see qualifications) but still reflect the unique achievements of the nominee.

BRIEF EVIDENCE: List achievements, patents, papers, etc., for which evidence can be gathered or is available, which supports the candidacy and focuses on the CITATION. For example: "10 patents on relevant subject (1963-81); 5 papers and 2 books (1961-80)".

1.4 QUALIFICATIONS

The **OUTSTANDING ENGINEER AWARD** is designed to recognize members who, through their technical and professional abilities have made outstanding contributions to their profession. Evaluation criteria: importance of technical contribution (65%); output of patents, proprietary designs, papers and technical presentations (10%); service to the IEEE (5%); service to the engineering profession (5%); recognitions (5).

The **OUTSTANDING ENGINEERING EDUCATOR AWARD** is designed to recognize members who, through their academic contributions, have enhanced the engineering profession. Evaluation criteria: importance of educational contributions (50%); output of papers, textbooks, and technical presentations (25%); years of educational distinction (10%); service to the IEEE (5%); service to the engineering profession (5%); recognitions (5).

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

1.5 ELIGIBILITY

- Only IEEE members with 3 years residency in the Orlando Section are eligible.
- A nominee cannot be considered for more than one award simultaneously.
- 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.

COMPUTER SOCIETY MEETING ANNOUNCEMENTS

Topic One

"Computer Architecture for Partial Match Retrieval in the Context of Logic Programming"

Date & Time: November 10, 1986....10:00 am

Place: University of Central Florida. Computer Center II,
Room 103

Topic Two

"Computer Architecture for Data and Knowledge Bases"

Date & Time: November 10, 1986....6:00 pm

Place: Downtown Orlando Public Library,
Cypress Room, third floor

Speaker: Dr. P. Bruce Berra, Syracuse University

Point of Contact: For any additional information contact Jorge Medina (834-9600), Dr. H.N. Srinidhi (275-2637) or Steve Forsythe (244-1166).

Admission: No charge, but reservations are required. All members, students and industrial representatives are invited.

"Software State Machine Design and Application with a 'Compeditor' Software State Machine Compiler"

Date & Time: December 1, 1986....10:00 am

Place: University of Central Florida, Computer Center II,
Room 103

Speaker: Mr. Allen Y. Edelberg, Marik Corporation

Point of Contact: For any additional information contact Jorge Medina (834-9600), Dr. H.N. Srinidhi (275-2637) or Steve Forsythe (244-1166).

Admission: No charge, but reservations are required. All members, students and industrial representatives are invited.

Program: Student Paper Contest Award and Presentation "Making Computers User-Friendly: Current Features and Future Possibilities"

Date & Time: December 4, 1986....10:00 am

Place: University of Central Florida, Computer Center II,
Room 103

Point of Contact: For any additional information or reservations contact Dr. H.N. Srinidhi (275-2637). Jorge Medina (834-9600) or Steve Forsythe (244-1166).

Admission: No charge but reservations are required. All members, students and industrial representatives are invited.

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TIME SENSITIVE MAIL

IEEE STUDENT BRANCH - NOVEMBER EVENTS

TOPIC: "State of the Art in Digital Processing"

SPEAKER: Bob McNamara, Martin Marietta Aerospace

DATE & TIME: Friday November 7, 1986....12:00 noon

PLACE: PC-3-202

**TOPIC: "An introductory talk on the Principles and Applications
of Piezoelectric Transducers"**

SPEAKER: Dr. Robert Martin, Associate Professor, University of Central
Florida

DATE & TIME: Friday November 14, 1986....12:00 noon

PLACE: PC-1-101

**TOPIC: "What electrical engineering students can expect after
graduation."**

SPEAKER: Jack Krips, Director of Electrical Engineering, Martin Marietta
Orlando Aerospace

DATE & TIME: Friday November 21, 1986....12:00 noon

PLACE: PC-3-202

**For any more information on the above events
contact Dr. Michael Harris (275-2548)**

**COMMUNICATION & VEHICULAR TECHNOLOGY CHAPTER
MEETING NOTICE
"ANTENNA FABRICATION"**

Date: Wednesday November 12, 1986....7:00 pm

Place: COMTECH SYSTEMS, INC., St. Cloud, Florida

Speaker: Glenn F. Higgins, V.P. & Gen. Manager, Comtech Antenna Corp.

For more information and directions contact:

M.A. Belkerdid (Office) 275-2324 (Home) 699-4890

Other: Due to the late hour and the location, beverages and food (cold cuts,
cheese, rolls, etc.) will be provided compliments of Comtech Systems, Inc.

DECEMBER 1986

The

**ORLANDO SECTION
MONTHLY**

VOLUME XXI
NUMBER 5

CIRCULATION 1250

IEEE



**HAPPY
HOLIDAYS**

CHAIRMAN'S CORNER DECEMBER 1986

The chapters have finished completing their plans for meetings this year and are working hard planning for next year. If you are interested in being a speaker or know someone who would like to make a presentation, please contact the appropriate chapter chairman. also, please try and support the chapters by attending meetings. It takes some time and effort but it is certainly worth it. Jake Alsaka is getting the last few names necessary to start an Acoustics, Speech & Signal Processing chapter. If you are interested in helping, call Hal Brown at 275-2786.

Another reminder that awards nominations are being accepted now by the Orlando Section. The process is relatively painless and you could see a deserving individual gain recognition. If you are in need of further information, call our Award's Chairman, Frank Fluet, at 849-1131.

Have a joyous Holiday Season

Donald C. Malocha
Orlando Section Chairman

The next **IEEE Executive Meeting** will be on Tuesday, December 2, at 5:30 pm. The meeting will be held at the Orlando Public Library in the Cypress Room, third floor.

EXECUTIVE BOARD

Chairman.....	Donald C. Malocha	(Bus.) 275-2414	(Home) 862-5693
Vice-Chairman.....	Geoffery Dick	(Bus.) 356-7752	(Home) 678-0975
Secretary.....	Thomas Nelson	(Bus.) 843-7030	(Home) 365-6833
Treasurer.....	Madjid A. Belkerdid	(Bus.) 275-2324	(Home) 699-4890
Chapter's Chairman...	Keith Huddleston	(Bus.) 356-7201	(Home) 339-0336

MEETING ANNOUNCEMENTS

UFCF CHAPTER MEETING NOTICE

Date & Time: Thursday, December 11, 1986....6:00 pm

Place: UCF New Engineering Building, Room 388

Topic: SAW Devices in Communication Systems

Author: Dr. Madjid A. Belkerdid

Contact: For more information contact Sunder Gopani at Sawtek, 886-8860.

Abstract: Surface Acoustic Wave (SAW) devices have a wide range of applications in Communication Systems besides filter implementations.

The use of SAW devices as modulators, correlators, and radar pulse generators will be presented. Examples of such systems will be discussed in a tutorial fashion. Spread spectrum applications will also be covered.

About the Author: Madjid A. Belkerdid holds a BSE, MSE and a Ph.D. degree from the University of Central Florida. He is currently an Assistant Professor of Engineering at UCF in the Electrical Engineering and Communication Sciences Department. He has published in the area of Communications, Fiber Optics, SAW Devices and RF Systems. He is currently the Chairman of the Communications and Vehicular Technology Chapter and Treasurer of the IEEE Orlando Section. Dr. Belkerdid is a member of Tau Beta Pi and Eta Kappa Nu.

IEEE STUDENT BRANCH

Our antenna positioner project is growing strong. We are looking for organizations that would like to donate the motor, activator or computer. If your organization is interested in making a tax deductible donation, contact Dr. Michael Harris at 275-2548.

Our Electrical Engineer T-Shirts are here! We will be selling them in the CEBA-Lobby, or you can go by room 416 and pick one up.

We have several great activities planned for spring, including a distinguished lecturer in the control systems field, tours and several interesting speakers from local companies.

GOOD LUCK TO ALL ON FINAL EXAMS!

**Student Paper Contest Award and Presentation
"Making Computers User-Friendly: Current Features and
Future Possibilities"**

Date & Time: December 4, 1986....10:00 am

Place: UCF, Computer Center II, Room 103

Point of Contact: Dr. H.N. Srinidhi (275-2637)

A meeting of the
COMMUNICATIONS & VEHICULAR TECHNOLOGY
Chapter was held on October 15, 1986. The following Chapter
Officers were elected:

Chairman: Madjid Belkerdid
Vice-Chairman: Ed Ellis
Secretary: Mike Lewis
Programs Chairman: Bruce Blais

.....
**COMMUNICATIONS & VEHICULAR TECHNOLOGY
CHAPTER MEETING NOTICE**

Date & Time: Wednesday, December 10, 1986....6:00pm

Place: UCF, CEBA (New Engineering Building), Room 227

Title: Entropy Methods in Image Processing

Speaker: Dr. Nicolaos Tzannes

Contact: For more information, contact Dr. Belkerdid, work (275-2324), home (699-4890).

Abstract: After a brief introduction to the principles of Maximum Entropy and Minimum Relative Entropy, the talk introduces their use in image processing, particularly in reconstructing images that have been transform-coded. The talk is illustrated by some examples.

About the author: Dr. Tzannes received his BS degree from the University of Minnesota, his MS from Syracuse University and his Ph.D. from the Johns Hopkins University. He has worked for IBM and Minneapolis Honeywell. He has been a consultant for IBM, NASA and the Raytheon Corporation. He has taught at Johns Hopkins, Tufts University, the University of Oklahoma, Oregon State University and the University of Patras, Greece. He is the author of the book "Communications and Radar Systems", published in 1985 by Prentice Hall, as well as many papers in journals and proceedings and conferences. He is presently Professor and Chairman of the EECS Department.

CALL FOR AWARDS NOMINATIONS

As part of our Section's Annual *AWARDS BANQUET*, to be held in conjunction with National Engineering Week in February 1987, the following awards will be given to recognize noteworthy Orlando Section members.

OUTSTANDING ENGINEER
1986 (Plaque)

OUTSTANDING ENGINEERING EDUCATOR
1986 (Framed certificate)

CHAPTER ENGINEER OF THE YEAR
(Potentially one from each of the 9 Society Chapters in the Section. Each award is a framed certificate. The recipient is automatically a candidate for the **OUTSTANDING ENGINEER** award).

OUTSTANDING CHAPTER CHAIRMAN
1986 (framed certificate)

OUTSTANDING ELECTRICAL ENGINEERING GRADUATE STUDENT
(Framed certificate and \$25 US Savings Bond)

NOMINATORS

Any Orlando Section member in good standing may submit nominations for **OUTSTANDING ENGINEER**, **OUTSTANDING ENGINEERING EDUCATOR**, or **CHAPTER ENGINEER OF THE YEAR**. The first step is to complete an "Orlando Section Award Candidate Search Form" which also contains the candidate qualifications requirements. (The original form appeared in the **ORLANDO SECTION MONTHLY** for November 1986. Additional copies are available by Calling Frank Fluet at (305) 849-1131.

The **CHAPTER CHAIRMAN OF THE YEAR** recipient is selected by the Section Awards committee. The two student award recipients are selected by the University of Central Florida, Electrical Engineering and Computer Sciences Department.

The Chapter Secretary

G.K. Huddleston

Next April, each IEEE Chapter will hold elections for new officers. In the intervening months, the current officers will be seeking candidates to take their places. It is my purpose to facilitate your serving as a Chapter Officer by explaining what is entailed in each position. The Local Arranger's position was described in the Section Quarterly. This column highlights the Chapter Secretary.

The Secretary's job starts early in the program year. First of all, the Secretary follows the direction of the Chapter Chairman in writing letters to the Society requesting the usual financial assistance and that a National Lecturer be sent to speak to the chapter on the planned program date. He or she helps the Chairman to prepare and mail an invitational letter to all Chapter members early in the program year. This mailing also includes a copy of the planned program and perhaps a notice of the first meeting.

After the program year gets into full swing, the Secretary is kept busy each month. On or about the 15th of the month, he sends the details of next month's meeting to T.T. Publications, Inc., for publication in the Section Notes. A week before the meeting, the Secretary prepares and distributes to his shadow network about 50 copies of a meeting notice. This is how the meeting notices magically appear on the doors of your work places about two days before your chapter meetings!

Perhaps the most important duty of the Secretary is to complete and send a **Meeting Report** immediately after a meeting is held. The original goes to the Section Secretary, and copies go to the Chapter Activities person at the Section level (me!) and at the National Society level. All rebates and financial assistance to the Orlando Section from IEEE HQ are computed on the basis of these Meeting Rports. A rebate of \$35 is returned to the Section for each Chapter meeting held (minimum of two meetings required). This rebate is used to help finance Chapter activities for the following year.

Another important duty of the Secretary is to make it easy for people to join the IEEE and his chapter. Last year, IEEE Headquarters rebated 70 cents for each chapter member to the Orlando Section. Approximately half of the 1200 IEEE members in Orlando belong to our seven chapters of the professional societies. Membership materials are available from each Chapter Secretary and the Section Membership Chairman Woody Carter (O: 843-7030).

(continued on following page)

For your information, the current Secretaries in Orlando are as follows:

AP/MTT	Thomas G. Picard	O: 356-7332
AES	(Need One!) Call Dave Flinchbaugh	H: 859-4855
ED	(Need One!)	Call Hal Brown
COMP	Hassan N. Srinidhi	O: 281-5795
COM/VT	Mike Lewis	O: 275-2637
SU	Donald Malocha	O: 886-8860
PE/IA	Sally M. Merry	O: 275-2414
Section	Tom Nelson	O: 629-1901
		O: 843-7030

Now you know what a Secretary does and who they are. My purpose for telling you this is to make it easier for you to serve in such a capacity. Let one of the above secretaries know that you are interested in taking his or her job. They are looking for replacements for next year -- and the following year.

.....

Announcement!

New Chapter Being Formed!

**ACOUSTICS SPEECH
AND
SIGNAL PROCESSING**

A Chapter Organizational Meeting will be held:

Date: Thursday, January 22, 1987 at 6:30 pm.

Location: Orlando Public Library

Watch for confirming announcement in January Section Monthly Notes or call: "Jake" Alsaka at UCF for more information (305) 281-5768

ALL SECTION MEMBERS WELCOME. HELP GET THIS NEW CHAPTER OFF THE GROUND!

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FEBRUARY 1987

The

ORLANDO SECTION MONTHLY

VOLUME XXI
NUMBER 6

CIRCULATION 1250

IEEE

*The IEEE Orlando Section
Executive Committee cordially invites you to
attend the*

1987 *Awards Banquet*

Saturday, February 21

Airport Marriott

Featured Speaker

A. Thomas Young

President, Martin Marietta Orlando Aerospace

Schedule of Events

6:00 Cash Bar, Hors D'Oeuvres & Mingle

7:00 Dinner *main entree of Chicken Kiev*

8:00 Awards Presentation

8:30 Featured Presentation

"Martin Marietta & The Aerospace Program"

Tickets are \$21.00 per person

For Reservations, Call: Ed Ellis: 834-3319

Conrad Blankenzee: 351-9485 or (hm) 876-3577

Reservations Required by Feb. 13

CHAIRMAN'S CORNER

February, 1987

First, a thousand apologies to anyone who tried to attend Dr. Y. T. Lo's talk at Hewlett Packard on January 15th. The date was changed due to a speakers conflict and communications were lost. He presented his talk on January 22nd. This is the first error in posting a meeting in several years and we will make every effort to make it the last error.

February is our busiest and best month. Please note the Orlando Section Awards Banquet on February 21st. This is an ideal time to mix with friends and colleagues. Both you and your spouse will have an enjoyable evening. The UFFC-S, Comm/VT and the Section are having a joint dinner meeting on Feb. 18 with Dr. Chen Tsai, UFFC-S National Lecturer, being the featured speaker. This should be an outstanding technical presentation.

February 22nd - 28th is National Engineers Week. Maybe this is the time to get involved. Note this month's activities and choose one to attend. We realize your time is valuable and we provide the best opportunities we can for professional development through our local Section, however, you need to attend to gain the benefits.

Finally, a welcome to all members and those members who have moved into the Section. We look forward to serving you and encourage your participation.

Donald C. Malocha
Orlando Section Chairman

The next **IEEE Executive Meeting** will be on Tuesday, February 3, at 5:30 pm. The meeting will be held at the Orlando Public Library in the Cypress Room, third floor.

EXECUTIVE BOARD

Chairman	Donald C. Malocha	(Bus.) 275-2414 (Home) 862-5693
Vice-Chairman	Geoffery Dick	(Bus.) 356-7752 (Home) 678-0979
Secretary	Thomas Nelson	(Bus.) 843-7030 (Home) 365-6837
Treasurer	Madjid A. Belkerdid	(Bus.) 275-2324 (Home) 699-4890
Chapter's Chairman	Keith Huddleston	(Bus.) 356-7201 (Home) 339-0336



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Specialists in Analog Electronics and Electro-optics

Opportunity for a **SENIOR ANALOG DESIGN ENGINEER**

Become a part of the Analog Modules team: a small, fast-growing corporation specializing in:

- Electronics for Electro Optics
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- Power Supplies

Candidate must have 8 - 10 years analog design experience, strong motivation, and be capable of leadership with state-of-the-art technology. Excellent benefits and potential for the right individual.

Call **Ian Crawford**
Days: 834-3806, Evenings: 767-5219

National Engineers Week

February 28, 1987

Sponsored by the Florida Engineering Society

Sea World

- 6:00 pm _____ Mix and Mingle at the Cash Bar
6:45 pm _____ Good Bread, Good Meat, Come On, Let's Eat
8:00 pm _____ Giving Out the Awards and Door Prizes
8:30 pm _____ Take 15 (intermission)
8:45 pm _____ Fun & Laughs Provided by George Plimpton -
Man or Myth?
9:30 pm _____ Rub Elbows with George Plimpton at the
Champagne Reception (for Gold Sponsors Only)

Individual tickets: \$25.00, contact Mark Canty, Tickets Chairman,
c/o Soil & Materials Engineers, Inc., 370 North Lake Blvd., Suite 1028,
Altamonte Springs, FL 32701, (305) 331-5967. *Before Feb. 6, 1987*

*The IEEE Orlando Section & The American Electronics Association
invites you to attend*



THE ELECTRONICS INDUSTRY OUTLOOK: 1987 AND BEYOND

Wednesday, March 4, 1987

4:15 - 5:00 PM Registration
5:00 - 6:30 PM Program
6:30 - 7:30 PM Reception

Stouffer's Orlando Resort

6677 Sea Harbor Drive, Orlando

COST: \$40.00 per person, Company discounts:
groups of 8 (\$280) or 10 (\$350) available.

Our industry panelists are top-level executives who manage companies in key, bellwether segments of the industry. Their companies embrace a broad spectrum of the industry and each is a leader in its field: computers, test and instrumentation, telecommunications, aerospace and defense. Each panelist has an excellent vantage point from which to peer into tomorrow's electronics industry. You won't want to miss this opportunity to share in the insights of our distinguished panel, participate in the discussion that follows and gain a better perspective on the electronics industry outlook -- 1987 and beyond!

ABOUT THE PANELISTS:

Dean Morton, Executive V.P. & C.O.O., Hewlett Packard Company - Mr. Morton with H. P. over 25 years, serves as chairman of H.P.'s Management Council and a member of the Executive Committee. H.P., based in Palo Alto, CA., employs about 84,000 worldwide and is a leader in the manufacture of integrated instrument and computer systems, test and measurement instruments, medical electronics, and solid-state components.

A. Thomas Young, President, Martin Marietta Orlando Aerospace - Mr. Young, previously with

...and to your experience in the aerospace industry. Martin Marietta's, Orlando facility, employs 14,500 and designs, develops and produces a wide variety of missiles, guided projectiles, weapon delivery systems, communications and electronic systems.

Edward Bleckner, Chairman & Chief Executive Officer, Racal-Milgo - Mr. Bleckner has over twenty-five years experience in the data communications industry, previously holding engineering positions at Milgo Electronics, Westinghouse & Melpar. Racal-Milgo, based in Sunrise, employing nearly 3,000 is the world's largest independent manufacturer of high-speed modems and is a leading supplier of a variety of data communications and data security systems.

MODERATOR: Gabe Rosica, President & CEO, MODCOMP - Mr. Roscia, previously with the Foxboro Company, has extensive background in the industrial computer and control systems businesses. MODCOMP, based in Ft. Lauderdale, with 800 employees manufactures computer systems in the industrial automation, communications and scientific markets.

Sponsored by: AEA Florida Council
Supporting Organizations: Central Florida Council for High Technology
IEEE Orlando Florida Section

-----REGISTRATION-----

Please make checks payable to AEA & remit to: Linda Schmick, American Electronics Association, 1200 W. Colonial Drive, Orlando, Fla 32804.

NAME: _____ TITLE _____

COMPANY: _____

ADDRESS _____ PHONE _____

Please return no later than Feb. 23rd. NO REFUNDS for cancellations after Feb. 27th.

[] I am not a member of AEA. Please contact me about the benefits of corporate membership.

MEETING ANNOUNCEMENTS

COMPUTER SOCIETY POWER ENGINEERING SOCIETY INDUSTRY APPLICATIONS SOCIETY

Jointly Presents a Valentines Day Special

A Tour of Harris Corporation's

EMS/SCADA Design and Manufacturing Plant

Date & Time: Saturday, February 14th from 9:45 until Noon

Program: The electric utility industry is overlaying a computerized energy-management network on its electrical system. Behemoths called EMS and SCADA systems, capable of tracking 10,000 analog and 30,000 digital data points are being used for real time monitoring and control. They determine the most cost-effective dispatch of generation, optimize buy and sell decisions, monitor the entire transmission system, warn of potential power failures and advise operators on how to avert them. The presentation will be followed by a tour of their manufacturing facility and a demonstration of the equipment.

Spouses are welcome to attend. A luncheon will follow the program at about 12:30.

Reservations: Reservations are necessary. Call Mike Haddad 281-2393, Jorge Medina 831-2800, Bob Gray 281-3269 or Steve Forsythe 244-1166 by Wednesday, February 11 to reserve and indicate if you wish to carpool.

Directions: Harris Corporation is located in Melbourne, FL. Travel time from Orlando International Airport is approximately 90 minutes. Take I-95 to Eau Gallie Blvd. exit. Go east for about a quarter of a mile to John Rodes Blvd. Turn right (south) onto John Rodes Blvd. and follow for several minutes until Harris appears on left. Proceed to the main guard house and state that you are there for the IEEE presentation in building 5. *Please be on time as security arrangements preclude the admission of late-comers and persons without reservations.* Carpooling is encouraged.

STUDENT BRANCH

Feb. 10th...Tour of Litton Laser Systems

Feb. 13th...Meeting. Speaker: Mr. Robert Mongeon, Litton Laser Systems. CEBA 427 at 12:00.

Feb. 20th...Engineering Fair. UCF. Contact Patti Oigarden.

Feb. 27th...Meeting. Speaker: Dr. Larry Andrews, UCF Math Dept. Prof., "Graduate Math Course Orientation for EE Students". CEBA 427 at 12:00.

Chairman: Patti Oigarden, Vice-Chairman: Chip Maynard, Secretary: Jorge Cadiz, Treasurer: Larry Ossi, Advisor: Dr. Michael Harris

TEST INSTRUMENTATION DESIGN ENGINEERS

General Electric has been selected to lead a multi-year program to design a new generation of Test Instrumentation & ATE Systems

We are now entering the full scale development stage of this potential \$2 billion project.

CASS (Consolidated Automated Support System) will be a totally integrated system incorporating new hardware and software specifically designed to standardize and consolidate test instrumentation systems for naval aircraft and shipboard systems. To accomplish our objective, General Electric's Automated Systems Department in Huntsville, Alabama will be recruiting technical professionals who are ready to design and develop a whole new generation of integrated test instrumentation and ATE hardware and software systems.

Test Instrumentation Design Engineers will perform circuit design on a wide range of RF, analog and digital instrumentation. You will also participate in the development of requirements specifications, technical concepts and plans for instrument designs. Requirements include a BSEE (or equivalent education/experience), previous exposure to CAE/CAD systems and extensive design experience with any of the following: Spectrum Analyzers, Vector Voltmeters, Digital Multimeters, Digital/Analog Oscilloscopes, Logic Arrays, Signal Processing Hardware, Network Analyzers, Synthesizers, Waveform Recorders, Pulse Generators, Custom Bipolar/CMOS and ECL.

These positions are available at General Electric's Automated Systems Department in Huntsville, Alabama. For those of you unfamiliar with Huntsville, you might be interested in a few facts. Huntsville, Alabama is home to more Fortune 500, advanced technology firms than many of America's largest cities. Yet, our cost of living (approx. 80% of most metro areas), our educational and cultural facilities, and the general quality of life in Huntsville makes our community one of the most "liveable" in the nation.

General Electric offers a competitive salary and benefits package, relocation assistance, and continued opportunities for both management and technical development. For immediate consideration, please forward your resume, including salary requirements, to: **General Electric Automated Systems Department, 110 Wynn Drive, Huntsville, AL 35805, Attn: Dept. IEEE/MN** U.S. citizenship is required. An equal opportunity employer.

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Joint Dinner Meeting
**Ultrasonics, Ferroelectrics & Frequency Control
Society,
Communications & Vehicular Technology Society
and the Orlando Section**

Date & Time: February 18, 1987...6:30 pm

Place: House of Beef, 801 John Young Parkway, Orlando

Topic: Acousto-Optic Interactions, Devices and Applications

Speaker: Dr. Chen Tsai (1987 IEEE UFFC National Lecturer)

Contact: For Reservations, contact Sunder Gopani 886-8860,
Donald Malocha 275-2414, Madjid Belkerdid 275-2324.

AP/MTT Society

Date & Time: February 19, 1987...5:30 pm

Place: Hewlett Packard, Lake Ellenor Drive

Topic: Large Phased Arrays

Speaker: Mr. L. Yorinks, RCA Missile and Surface Radar
Division, Morristown, PA

Abstract: The design problems of large ground or ship based
antennas will be discussed.

A dinner at Gary's Duck Inn with the speaker is available for those
interested.

Contact: For further information contact: Joe Kiss 356-6549 or
Bob Smallwood 859-2900.

UFFC

Date & Time: March 9, 1987...6:00pm

Place: Piezo Technology, Inc.

Subject: TMXO

Contact: Sunder Gopani 886-8860

MARCH 1987

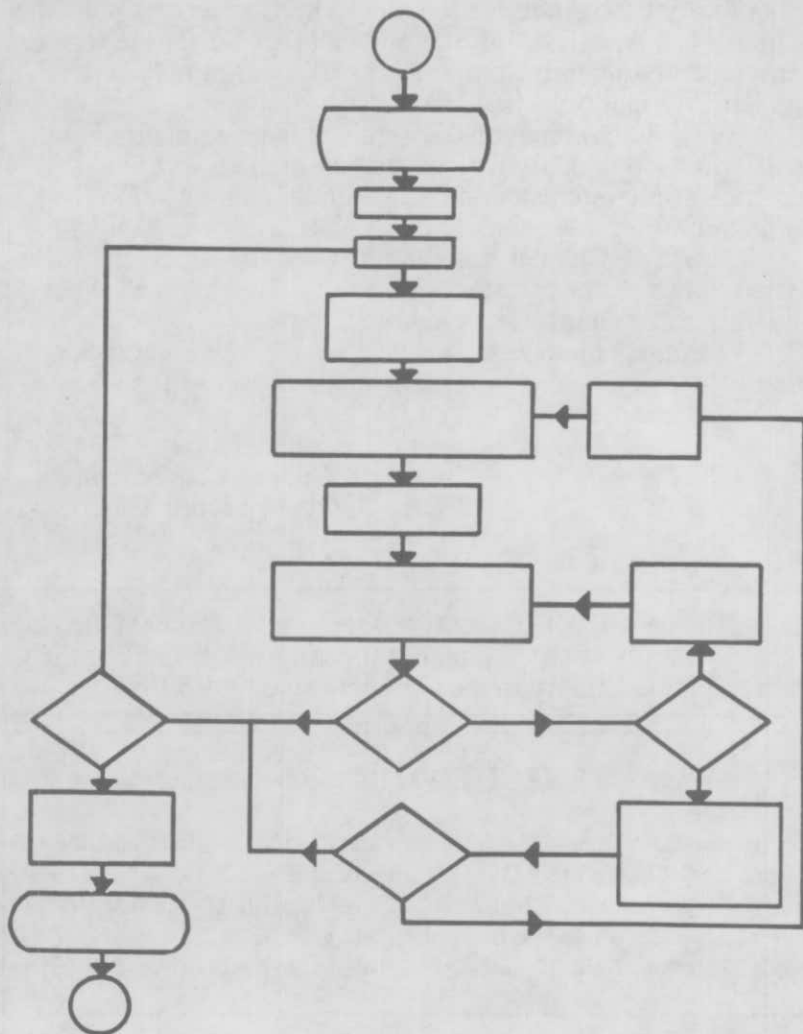
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ORLANDO SECTION MONTHLY

VOLUME XXI
NUMBER 7

CIRCULATION 1250

IEEE



CHAIRMAN'S CORNER

March, 1987

Any EE who is currently unemployed and wishes to advertise a very concise vitae for publication in the Quarterly is encouraged to send information to T.T. Publications. Any member wishing to send in a classified ad or an article for publication in the Quarterly is also encouraged to do so. Ads are limited to electronics or engineering items only. Information is due at T.T. Publications one month prior to its publication date. The Quarterly is published on January 1st, April 1st, July 1st and October 1st. These services are provided at no charge to members. Editorial rights are reserved by the IEEE Orlando Section.

The 1987 Nominations Committee is being chaired by Ed Ellis. If you wish to apply for nomination in the Executive Committee or are interested in participating at any level in the Orlando Section, please contact Ed at 834-3319 or myself.

The ASSP Chapter has gone forward for approvals and is expected to be officially started this month. Thanks to all those involved in forming this new Orlando Chapter.

A welcome to all new members who have joined our Section. We look forward to serving you and encourage your support of Section activities.

Donald C. Malocha
Orlando Section Chairman

The next **IEEE Executive Meeting** will be held on Tuesday, March 3 at 5:30 pm. The meeting will be held at the Orlando Public Library in the Cypress Room, third floor.

EXECUTIVE BOARD

Chairman	Donald C. Malocha	(Bus.) 275-2414 (Home) 862-5693
Vice-Chairman	Geoffery Dick	(Bus.) 356-7752 (Home) 678-0979
Secretary	Thomas Nelson	(Bus.) 843-7030 (Home) 365-6837
Treasurer	Madjid A. Belkerdid	(Bus.) 275-2324 (Home) 699-4890
Chapter's Chairman	Keith Huddleston	(Bus.) 356-7201 (Home) 339-0336

TEST INSTRUMENTATION DESIGN ENGINEERS

General Electric has been selected to lead a multi-year program to design a new generation of Test Instrumentation & ATE Systems

We are now entering the full scale development stage of this potential \$2 billion project.

CASS (Consolidated Automated Support System) will be a totally integrated system incorporating new hardware and software specifically designed to standardize and consolidate test instrumentation systems for naval aircraft and shipboard systems. To accomplish our objective, General Electric's Automated Systems Department in Huntsville, Alabama will be recruiting technical professionals who are ready to design and develop a whole new generation of integrated test instrumentation and ATE hardware and software systems.

Test Instrumentation Design Engineers will perform circuit design on a wide range of RF, analog and digital instrumentation. You will also participate in the development of requirements specifications, technical concepts and plans for instrument designs. Requirements include a BSEE (or equivalent education/experience), previous exposure to CAE/CAD systems and extensive design experience with any of the following: Spectrum Analyzers, Vector Voltmeters, Digital Multimeters, Digital/Analog Oscilloscopes, Logic Arrays, Signal Processing Hardware, Network Analyzers, Synthesizers, Waveform Recorders, Pulse Generators, Custom Bipolar/CMOS and ECL.

These positions are available at General Electric's Automated Systems Department in Huntsville, Alabama. For those of you unfamiliar with Huntsville, you might be interested in a few facts. Huntsville, Alabama is home to more Fortune 500, advanced technology firms than many of America's largest cities. Yet, our cost of living (approx. 80% of most metro areas), our educational and cultural facilities, and the general quality of life in Huntsville makes our community one of the most "liveable" in the nation.

General Electric offers a competitive salary and benefits package, relocation assistance, and continued opportunities for both management and technical development. For immediate consideration, please forward your resume, including salary requirements, to: **General Electric Automated Systems Department, 110 Wynn Drive, Huntsville, AL 35805, Attn: Dept. IEEE/MN** U.S. citizenship is required. An equal opportunity employer.

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IEEE ULTRASONICS, FERRO ELECTRICS AND FREQUENCY CONTROL SOCIETY

Date & Time: Monday, March 9th...6:00pm

Place: Piezo Technology, Inc., 2525 Shrader Road
Orlando, Florida 32804, 305-298-2000

Topic: Tactical Miniature Crystal Oscillator (TMXO)

Contact: Sunder Gopani, 886-8860

Speaker: Tom Payne, Director of New Product Development: PTI

Abstract: The Tactical Miniature Crystal Oscillator (TMXO) is a high-performance frequency standard intended for use in a wide range of advanced military communications, navigation and position determining systems. Key advantages of the TMXO are:

- (I) low power,
- (II) small size,
- (III) fast warm-up and
- (IV) frequency accuracy.

While the TMXO is an ovenized crystal oscillator, it uses a radically different mechanical design approach to achieve an order of magnitude reduction in power and size compared to conventional ovenized oscillators. Mechanical, thermal and electrical considerations are reviewed. Key operations such as resonator manufacture, vacuum processing including gettering and hybrid circuit assembly are described. Some performance data is presented.

ANTENNAS & PROPAGATION AND MICROWAVE THEORY & TECHNIQUES SOCIETIES

Date & Time: Thursday, March 19...5:30 pm

Place: Hewlett Packard

Contact: Bob Smallwood 859-2900

Topic & Speaker: To Be Announced

COMPUTER SOCIETY

Date & Time: March 19, 1987...10:00 am

Place: UCF, Computer Center II, Room 103

Topic: "Parallel Processing: Architectures and Algorithms"

Speaker: Dr. Lionel M. Ni, Dept. of Computer Science, Michigan State University

Abstract: Parallel processing is an inevitable approach to handle computationally intensive applications. Three different types of parallel processing architectures will be introduced: SIMD-type massively parallel processors, such as MPP and Connection Machine; shared memory multiprocessors, such as Cray-2 and Multimax; and loosely coupled multiprocessors, such as the hypercube machine. Operating system design considerations as well as parallel programming techniques for different types of parallel processors will be discussed.

Date & Time: March 19, 1987...6:00 pm

Place: Downtown Orlando Public Library, Cypress Room., third floor

Topic: "Local Area Networks"

Speaker: Dr. Lionel M. Ni, Dept. of Computer Science, MSU

Abstract: This presentation will address operating principles of three popular local network medium access methods: token-passing bus, CSMA/CD bus, and token ring. In addition to comparing these three different medium access methods, high-level protocol development, interconnection of different local area networks, and future trends of local area networks will be described.

About the Author: Dr. Ni received the B.S. degree in Electrical Engineering from National Taiwan University in 1973, the M.S. degree in Computer Engineering from Wayne State University in 1978 and the Ph.D. degree in Computer Engineering from Purdue University in 1980. He is currently an Associate Professor of Computer Science at Michigan State University. He has also worked and consulted for IBM. His current areas of interest are distributed systems design, computer networks, VLSI architectures and parallel processing techniques.

STUDENT BRANCH

Date: March 27, 1987

Speaker: Mr. Jack Krips, Director of Electrical Engineering, Martin Marietta Orlando Aerospace

Topic: TBA

Contact: Patty Oigarden (275-2548)

ACOUSTICS, SPEECH AND SIGNAL PROCESSING CHAPTER MEETING

Date & Time: March 25, 1987...6:30 pm

Place: Orlando Public Library

Speaker: Ali Atashroo, Martin Marietta Orlando Aerospace

Topic: "Signal Processing Software and Applications"

Contact: Y.Alsaka (271-5768)

POWER ENGINEERING SOCIETY INDUSTRY APPLICATION SOCIETY

Date & Time: Wed., March 18...6:00 pm dinner

7:00 presentation

Place: *Dinner* - Tien Garden Restaurant, 11786 E. Colonial Dr. (US 50). Located in Alafaya Village Shopping Center at intersection of Alafaya Trail and US 50.

Meeting - Westinghouse Electric Corp. Located at Alafaya Trail and University Blvd. Enter via new applicant entrance.

Topic: "Large Generator Technology -- What's inside and Why"

Speaker: Shay Foley, Manager of Generator Business Development, Westinghouse Electric Corporation.

Contact: For Dinner or Meeting reservations phone any of these people by Friday, March 13: Bob Gray (281-3269), Mike Haddad (281-2393), or Sally Merry (629-1901).

NOTICE OF NOMINATION OF SECTION OFFICERS

At the February meeting of the Executive Committee, the Nominating Committee presented the following slate of nominees for the elective offices of the Section's Executive Committee:
Nominees for Fiscal Year July 1, 1987 - June 30, 1988

Chairman	Geoffrey Dick
Vice Chairman	Thomas Nelson
Secretary	Keith Huddleston
Treasurer	Madjid Belkerdid

According to the Orlando Section By-Laws, "The Section membership may make additional nominations by submitting qualified petitions, meeting the following conditions: (a) Specify the office, (b) Bear the signature of at least 15 voting Section members, (c) Contain statement of nominee's consent to serve, (d) State nominee's qualifications and biography, (e) Be delivered to the Section Chairman on or before 1 April."

MAY 1987

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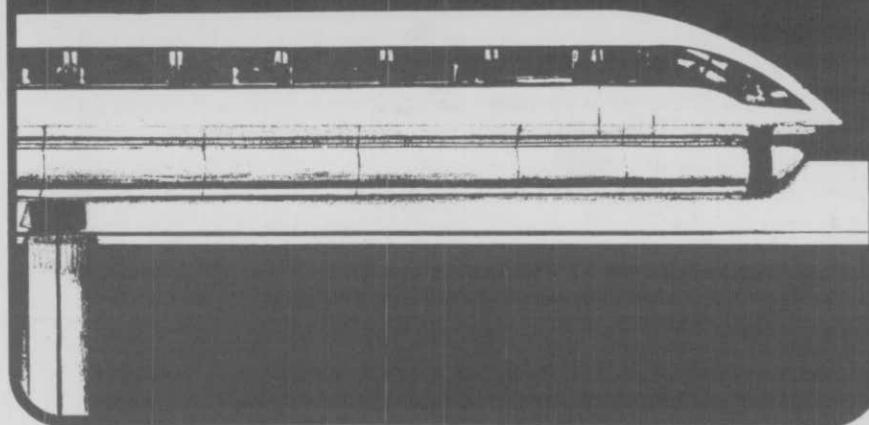
ORLANDO SECTION MONTHLY

VOLUME XXI
NUMBER 8

CIRCULATION 1250

IEEE

Maglev Research Presentation



See COM/VT
Meeting Announcement
Details Inside...

CHAIRMAN'S CORNER

May, 1987

In April, I as well as several other Orlando Section members, attended Southeastcon in Tampa. The conference went well with about 160 professional attendees and about 500 students. In addition, I attended the Florida Council and Region III IEEE meetings. In general, the Orlando Section is healthy and active with respect to many other sections. There are several sections much more wealthy than ours, (i.e. Atlanta and Florida West Coast), due to successful conferences in their areas. This is an area of activity which is currently lacking in our section but looks like it will increase in the next several years.

Our publications have evolved to near equilibrium. The monthly NOTES will stay as a tri-fold mailing unless advertisements are included to offset publication costs. The tri-fold optimizes our announcement space versus production costs. The Quarterly will modulate in size; dictated by advertisements, announcements and production costs. I hope this provides our members the proper media for communications in our section.

Mr. Michael Murray, Director of the Orlando Science Center Planetarium, has accepted an invitation to speak at our annual Installation Banquet in June. The topic of his presentation will be: "Is there life after Halley's Comet?" This should be an enjoyable evening for members and their spouses. All members are cordially invited to attend.

At a national level, the IEEE appears to be sponsoring more conferences and tutorials than are needed. A number of meetings have lost money, most recently Southcon, Atlanta and Tutorial East, Orlando. In light of the present tightening in the engineering industrial community and national economy, it is unclear as to the future direction which IEEE will take to maintain quality and profitable professional conferences.

There are still opportunities to participate in a leadership role in many of the Orlando Section chapters. Seize the opportunity: get involved in your profession.

Donald C. Malocha
Orlando Section Chairman

EXECUTIVE BOARD

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Treasurer	Madjid A. Belkerdid	(Bus.) 275-2324 (Home) 699-4890
Chapter's Chairman	Keith Huddleston	(Bus.) 356-7201 (Home) 339-0336

COM/VT CHAPTER

Date & Time: Wednesday, May 20, 1987...6:00 pm

Place: UCF, New Engineering Building, Room 435

Speaker: George McClure, Program Engineer, Martin Marietta Aerospace, Orlando

Topic: "Trends in Personal Communications"

Other Business: Election of New Chapter Officers

Contact: Dr. Belkerdid, 275-2324

Abstract: An overview of cellular radio will be presented, followed by present and future applications. The concept of personal privacy, computer communications, and paging will be discussed. The global concept of reaching anyone, anywhere, anytime with unique ID codes will be presented along with a look at the "crystal ball" to predict the communication applications of tomorrow.

About the Author: George McClure received his BS and MS degrees in electrical engineering from the University of Florida. He is presently a program engineer at Martin Marietta Aerospace, Orlando, Florida. He has several years experience in system design for cellular mobile telephone systems.

George is an IEEE Fellow. He is the Editor of the IEEE Transactions on Vehicular Technology and is an elected member of the Board of Directors of the IEEE Vehicular Technology National Society.

IEEE Vehicular Technology National Lecturer

Date & Time: June 1, 1987...6:00 pm

Place: UCF, New Engineering Building, Room 435

Speaker: Tony R. Eastham, Professor, Dept. of Electrical Engineering, Queen's University, Kingston, Ontario, Canada

Topic: "The Status of Maglev Research, Development and Implementation"

Contact: Dr. Belkerdid, 275-2324

Summary: Interest in the potential of Maglev vehicles for high speed transportation in several corridors in North America remains at a high level, primarily as a result of the prototype vehicle systems developed and operating in the Federal Republic of Germany and in Japan.

The speaker contributed to a study of the Las Vegas-Southern California corridor and, as part of a team from the Canadian Institute for Guided Ground Transport, conducted a Maglev technology assessment. The results of this study will be reviewed. It will be noted that both electromagnetic (attraction-mode) and electrodynamic (repulsion-mode) Maglev are technically viable, but that some development and substantial prototype evaluation, modification and testing to achieve and prove long term reliability is necessary before a commitment to install a Maglev system should be made. However, given the national commitment and momentum of the programs in the FRG and in Japan, this stage could be reached in 5 to 10 years.

The speaker believes that Maglev will be a viable operation for high speed intercity service. The technologies should be ready for implementation in corridors with appropriate demographic and economic characteristics by the mid-1990's; Tampa...Orlando...Miami?

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**POWER ENGINEERING SOCIETY
INDUSTRY APPLICATION SOCIETY**

Date & Time: Thursday, May 21, 1987...6:00 pm for Dinner,
7:30 pm for Technical Presentation.

Place: Dinner: Bennigan's, N. Semoran (Rt. 436), just west of the
I-4 Altamonte interchange.

Meeting: Fairchild Semiconductor Corporation at the
Maitland Colonnades Building, Suite 260, 2301 Lucien Way,
Maitland Center.

Topic: "Recent Changes in the National Electrical Code"

Speaker: Dwight Durham, Manager of Product Development,
Southwire Corp. Mr. Durham is a veteran of the electrical industry.
He serves on several NFPA Code Making Panels as well as
technical committees in NEMA, ASTM and the Aluminum
Association.

Contact: Reservations are required for Dinner or the Meeting. Call
any of the following by Friday, May 15: Mike Haddad (281-2393),
Bob Gray (281-3269) or Sally Merry (629-1901).

Program: The presentation will feature:

- A discussion of important changes in the 1987 NEC related to commercial buildings.
- A slide presentation covering interpretation and use of the new ampacity tables in the 1987 NEC.
- A brief review of the properties of aluminum conductors used in building wire and 1987 NEC changes affecting their use.

The next **IEEE Executive Meeting** will be held on Tuesday,
May 5th at 5:30 pm. the meeting will be held at the Orlando Public
Library in the Cypress Room, third floor.

ASSP

Date & Time: May 13, 1987...6:30 pm

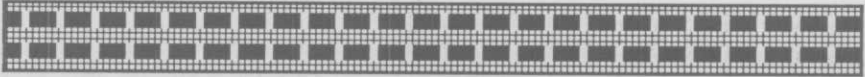
Place: Orlando Public Library, Cypress Room

Topic: "Target Spectral Analysis Using 24 GHZ CW Radar"

Speaker: George Gould, Martin Marietta Aerospace

Other Business: Election of Officers will also be held

Contact: For further information contact Dr. Alsaka (281-5768)



Orlando Section Installation Banquet
Saturday, June 20

6:00 pm

hors d'oeuvres

7:00 pm

Dinner

Speaker

Mr. Michael Murray

Director of the Orlando Science Center Planetarium

House of Beef

801 John Young Parkway

\$17 per person

Reservations:

Madjid Belkerdid (275-2324)

Conrad Blankenzee (351-9485)

Reservations required by June 15;

a reservation constitutes a ticket

All Members, Spouses & Guests Are Invited

COMPUTER SOCIETY

Date & Time: Thursday, May 21, 1987...6:00 pm to 7:00 pm

Place: Orlando Public Library, 3rd floor, Cypress Room

Speaker: Robert Pile, Account Representative, Digital Equipment Corporation

Topic: "Digital's VAXcluster Concept"

Contact: Public invited but you must have reservations. For reservations contact: Jorge Medina (831-2800) or Steve Forsyth (886-2231)

Abstract: The VAXcluster system, a new concept in VAX/VMS computing, is a multipurpose system that can provide the computer power, data resources, and storage capabilities generally associated with mainframe systems. Configured using a new method of interconnecting or clustering VAX processors and storage controllers, VAXcluster Systems give you increased capabilities for sharing data, distributing workloads, and providing higher system and data availability. VAXcluster Systems are unique to the computer industry because they can grow incrementally to keep pace with increasing demands of organizations and users without interrupting the existing VAXcluster System.

VAXcluster Systems provide a long-term computing and information strategy for the organization requiring resources that can adapt to its changing needs. A very large VAXcluster System can provide over 120 MIPS (Millions of Instructions Per Second) of processing power and store over 200 Gigabytes of data online. What's more, a VAXcluster System can be managed as a single system that runs the powerful VMS operating system.

Election of New Officers.....May 11, 1987

The Computer Society will meet at Chi Chi's across from Fashion Square Mall to receive nominations and hold elections for the 1987-88 Computer Society Officers. We will meet in the lounge at 5:30 for cocktails. The elections will be at 6:30 during dinner. Available offices: Chairman, Vice-Chairman, Secretary, Local Coordinator. In the past, we have divided the chapter's activities among several persons so that no one person will have the entire responsibility for the chapter. The Computer Society needs new blood so please call if you want to participate. For reservations contact: Jorge Medina (831-2800), Steve Forsythe (886-2231) or H.N. Srinidhi (275-2637).

Computer Society Membership Survey Results

Earlier this year we mailed a survey to the members of the Orlando IEEE Computer Society to find out what types of activities most members are interested in. We would like to thank all those who took the time to fill out the form and participate in the study. Here is a summary of the responses we received:

1. Preference for meeting topics: broad surveys of technical areas within the computer field and presentations of specific topics such as those covered by IEEE journal articles.
 2. Time & Place of meetings: the first week of the month was favored among those that expressed a preference. The most favorable times were between 6:00 and 7:00 pm. Most respondents favored either the middle of the Orlando Area or UCF. Since our meetings are now held in these areas, our current coverage is adequate.
 3. Most participants expressed some interest in having dinner meetings of some sort. We will try to schedule our meetings so that we can offer dinner at a nearby local restaurant after the meeting proper.
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JUNE 1987

The

ORLANDO SECTION MONTHLY

VOLUME XXI
NUMBER 9

CIRCULATION 1250

IEEE



"Is there life after Halley's Comet?"

Speaker: Mr. Michael Murray
Orlando Section Installation Banquet
June 20, 1987

CHAIRMAN'S CORNER

June 1987

This will be my last Chairman's Corner for the year as the new officers will be installed at the Installation Banquet on June 20th. This has been a most rewarding and challenging year and it has been a pleasure serving the Orlando Section. A summary of the year's activities will be provided in the July Quarterly.

I would like to thank all of the members and especially the Executive Committee for their support and guidance. It is a pleasure to be associated with professionals of such high caliber.

Please note the June 20th 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.

Donald C. Malocha
Orlando Section Chairman

The next **IEEE Executive Meeting** will be held on Tuesday, June 2nd at 5:30 pm. The meeting will be held at the Orlando Public Library in the Cypress Room, third floor.

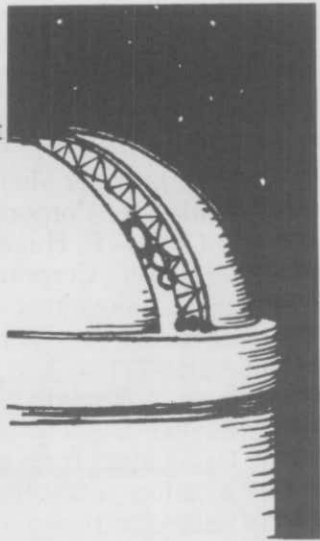
Nominees for Executive Committee 1987 - 88

Chairman _____	Geoffrey Dick
Vice Chairman _____	Thomas Nelson
Secretary _____	Keith Huddleston
Treasurer _____	Madjid Belkerdid
Chapter's Chairman _____	Jorge Medina

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Chapter's Chairman _____	Keith Huddleston	(Bus.) 356-7201 (Home) 339-0336

A year has passed since Halley's Comet was in our midst and the newspaper ads are void of used telescopes for sale. A curious thing has happened, the number of telescope manufacturers has increased. Optical components are back-ordered for a waiting list of six months or more. Recently your IEEE Vice-Chairman attended a Central Florida Astronomical Society meeting at the Orlando Science Center to find out what impending sky event is causing people to hang on to their instruments. Much to his astonishment, he learned there are all kinds of fabulous sky-wonders visible right now. To the eye, many of these objects appear much more spectacular than Halley's Comet.



Michael Murray is introducing the public to these events on a weekly basis with "ORLANDO AT NIGHT" Planetarium Shows and "SKYWATCH". Mr. Murray, featured speaker of the Installation Banquet is Director of the John Young Planetarium in Orlando, Florida. Mr. Murray serves as Manager of Staff and Operations at the Planetarium, a 40 foot dome facility that serves over 80,000 visitors from the general public each year, and 45,000 school children each year from four countries. He is Senior Producer of all major programs at the planetarium. He also directs the Carolyn Wine Observatory, which provides a weekly observing program for the public. Other duties include regular projects in all forms of media, workshop-course instruction and guest lecturing.

Before his work at the John Young Planetarium, he was an intern at the Strasenburgh Planetarium in Rochester, New York, an Associate Director of the University of Wyoming Planetarium, and Head Assistant of the Harry Zacheis Observatory-Planetarium at Adams State College. He graduated cum laude from Adams State College in Alamosa, Colorado with a B.S. degree in May of 1981. He had a composite major in Physics with a minor in mathematics and concentration in music. Honors include the President's Honor Roll, the Dean's List, Morris Scholarship in Physics, Departmental Scholarship, Who's Who in American Colleges and the College Register. He performed graduate work in infrared astronomy and atmospheric physics for the Department of Physics and Astronomy at the University of Wyoming in Laramie, completing 45 semester hours of coursework and thesis research.

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*Orlando Section
Installation Banquet*

Saturday, June 20

6:00 pm....hor d'oeuvres

7:00 pm....Dinner

Speaker: Mr. Michael Murray

Director, Orlando Science Planetarium

House of Beef, 801 John Young Parkway

\$17 per person

Reservations:

Madjid Belkerdid (275-2324)

Conrad Blankenzee (351-9485)

Reservations required by June 15;

a reservation constitutes a ticket.

All Members, Spouses & Guests Are Invited

COMPUTER SOCIETY

Date & Time: Thursday, June 18, 1987...6:00 pm

Place: Orlando Public Library, downtown Orlando, Cypress Room, third floor.

Speaker: Dr. J. Michael Moshell, UCF Computer Science Department and Genteware Corporation.

Dr. Charles E. Hughes, UCF Computer Science Department and Genteware Corporation.

Topic: "Freehand Sketching of Motion; the Action Graphics Simulation System". An Example of University-Industry-Government Cooperation.

Contact: Dr. H.N. Srinidhi (275-2637), Jorge Medina (831-2800) or Steve Forsythe (244-1166).

Abstract: Using ideas from object oriented programming, spread sheets and dataflow software, the authors have developed a highly flexible PC-based software environment for describing systems of moving objects and their interactions. Applications include tactics training and the development of problem solving skills.

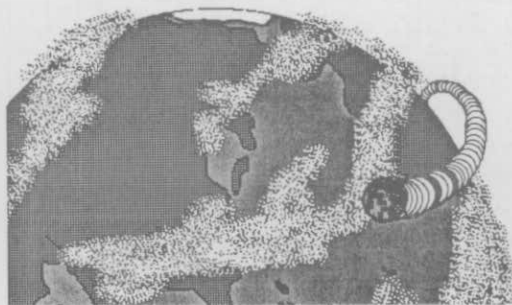
The Action Graphics project is sponsored by the Naval Training Systems Center and is being produced cooperatively by Genteware Corporation and the University of Central Florida.

IEEE COMPUTER SOCIETY NEW CHAPTER OFFICERS

Terms of office: 6/87 through 6/88

Chairman: Dr. Narsengh Deo
Vice Chariman: Stephen E. Forsythe
Secretary: Dr. Hassan N. Srinidhi
Treasurer: J.A. "Sander" Pack

Past Chairman: Jorge Medina



**POWER ENGINEERING SOCIETY
INDUSTRY APPLICATION SOCIETY**

Tour of DuPont Centre

Date & Time: Thursday, June 18, 1987....6:00 pm

Place: Meet in front of the Mellon-Stuart office across the street from the DuPont Centre at 77 Livingston Street, one-half block west of Orange Avenue.

Program: The DuPont Centre, with its innovative architecture, has become the most prominent addition to the Orlando skyline. Our tour will offer an inside look at the Centre's state-of-the-art electrical facilities.

Contact: For reservations, contact any of the following by Tuesday, June 16: Mike Haddad (281-2393), Bob Gray (281-3269) or Sally Merry (629-1901).

**CENTRAL FLORIDA ELECTRONIC CONNECTOR
STUDY GROUP**

Date & Time: Wednesday, June 24, 1987....6:00 pm

Place: Sheraton-Maitland, I-4 and Maitland Interchange.

Speaker: Fred Wachsman (Chapter President)

Contact: For more information call 857-3651.

ASSP

Date & Time: June 10, 1987...6:30 pm

Place: University of Central Florida, CEBA 436

Topic: "Energy Delay for White Band Signals as Applied to Underwater Acoustic Transducer"

Speaker: David George, Naval Underwater Research Laboratory

Contact: Dr. Alsaka (281-5768)

ASSP NEW OFFICERS

Chairman: Dr. Ali Atashroo

Vice Chairman: George Gould

Program Chairman: David George

Secretary/Treasurer: Adonis Barsallo