



THE INSTITUTE OF
ELECTRICAL AND
ELECTRONICS
ENGINEERS, INC.

RockIEEE Overlook

DENVER SECTION

JANUARY 1988

IEEE Denver Section Meeting

JANUARY DENVER SECTION MEETING AND INSTALLATION OF 1988 OFFICERS

The U.S. Space Foundation

Headquartered in Colorado Springs, the U.S. Space Foundation is in the unique position of promoting dialogue and debate on space and providing educators with a resource center for space information.

Mr. John Akey, Director of Education for the Foundation will explain and show, via video tape, how the Foundation's message is told to educators and the public. Attend this program and learn about:

- The Annual Space Symposium (attended by world wide authorities on space)
- NASA/FAA educational resource center
- The proposed \$10 million space museum in Colorado Springs

Date: Wednesday, January 6, 1988

Place: Stouffer Concourse Hotel (Airport), 3801 Quebec St. in the LaGuardia Room, Ballroom level. Parking \$2.50 in covered garage or on Poplar St. (west of hotel).

Time: 5:30 - cocktails 6:30 - dinner (optional @ \$13.50) 7:30 - meeting and program

Contact: RSVP by Monday January 4, 1988, Anita Wanberg, 220-8042.

Joint Boulder-Denver APS/MTTS/GRS -
Antennas and Propagation, Microwave
Theory and Techniques, and Geoscience
and Remote Sensing

Date: Tuesday, January 19, 1988

Place: National Bureau of Standards, 325
Broadway, Boulder, CO, Room 1107

Time: 4:00 pm - 5:00 pm

Speaker: David K. Barton, ANRO Engineering
Consultants, Lexington, MA

Topic: "Technology Trends in Microwave
Radar"

The capabilities of microwave devices used in today's radars are compared with requirements for future systems. Areas in which system requirements may drive technological advances are identified, along with those in which technology may open up new system approaches. Some of the systems considerations in applying the new technology are reviewed, and areas in which applications may be most practical are identified.

Contact: Hussain Haddad, 460-2114

PES/IAS - Power Engineering Society/
Industry Applications Society

Date: Thursday, January 21, 1988

Place: Clarion Hotel - Denver Airport
3203 Quebec St.

Time: 6:00 pm Social
7:00 pm Dinner (Optional @ \$15.00)
8:00 pm Program Begins

Speaker: Charles R. Wright, Retired
Public Service Company of Colorado

Topic: "History of the Telluride Power
Company and the Ames Hydroelectric
Generating Plant"

This interesting slide presentation covers the early days of the Telluride Company and the construction of the Ames Hydroelectric Generating Plant which was the beginning of the modern electrical industry in Colorado.

Contact: Barbara, Peterson Company, 388-6322
by January 18, 1988.

Reliability

Date: Friday, January 8, 1988
Place: IBM Boulder
Time: 9:00 am - 3:00 pm, lunch provided at no charge.
Speaker: Dr. Smauel Keene, IBM Boulder will lead a round-table discussion.
Topic: "Fault Tolerance Analysis"
Contact: Ley Andrews, 971-2377 for more information. Reservations are required and space is limited.

CS/ITS - Computer Society/Information Theory Society

Date: Thursday, January 21, 1988
Place: IBM Boulder
Time: 7:00 pm
Topic: IBM Publishing Systems
Contact: Reservations are required. Please call Rory Laiho, 924-7534 by Monday January 18, 1988. Further information will be provided with reservations.

Please cancel your reservations if you are unable to attend a meeting. No-shows will be responsible for the cost (if any) of dinners.

CENTENNIAL SUBSECTION NEWSLETTER

This space will be dedicated to information, programs, and activities of the Centennial Subsection.

The Overlook will become the communication vehicle for the Centennial Subsection members and will provide the Denver section membership information on Centennial programs of interest.

Notice From the Denver Section Treasurer

The treasurer requests that all checks issued by the section to the chapters, schools and individuals for IEEE activities be cashed immediately after receipt of the check.

NOTE: All outstanding checks that are currently over four months old will be canceled at the end of January 1988 to clear the 1987 financial books.

November PACE Meeting Summary by Bill Whipkey

The November PACE meeting featured Harriet Napierkowski, technical writing instructor at the University of Colorado in Colorado Springs. She presented evidence to dispel three myths engineers often believe about writing.

Myth #1. Engineers do not need to write! This may be true in the first year after graduation as new engineers usually work under the direction of a more senior engineer. But as the engineer moves on in his/her career to advising, supervising, and management with more responsibilities, the requirements and opportunity for writing also increase with technical reports, papers, and management correspondence. She quoted several Harvard Business Review articles which ranked those professional skills considered most important for promotion. Number one in every case was the ability to communicate. She also cited several studies which showed the use of

PACE ...

clearly written documents have saved organizations considerable expense. And the burden for understanding is clearly with the writer. Well written communications not only benefit the engineer who writes them, but also their organization and in turn, society.

Myth #2. Engineers cannot write! Language forms the basis of all human progress and this is especially true in communicating advancements in technology. In many situations, it is only the technical community who can advance society with written communication about advancements.

Myth #3. Writing may be easy for some, but not for me! Writing really requires work for most everyone and maybe even more so for the professional. Writing does not come as easily as verbal communications. Good writing requires stating the message, then criticism and revisions.

Here are four things management looks for in a well written technical document.

1) Arrangement - The main purpose of written communications is to convey a message. Always state your conclusions in the first paragraph. Data and reasoning would then follow. Studies show less than 10% of executives read to the end of any written communications.

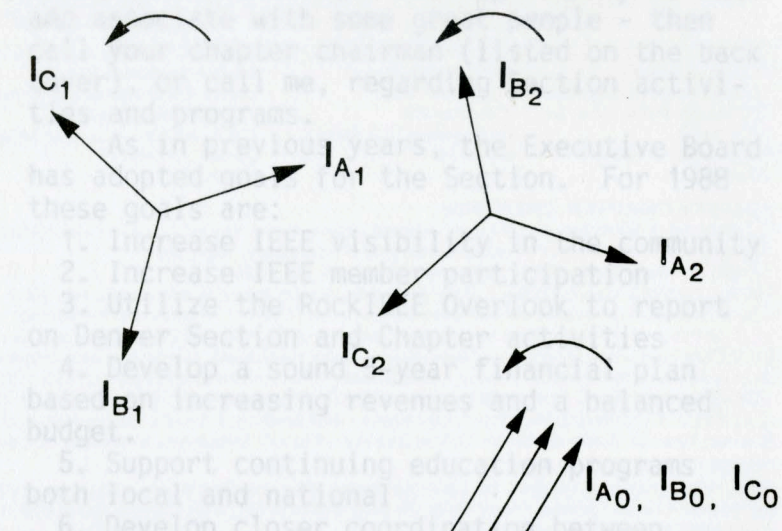
2) Clear - Written communications must be technically accurate and clearly stated. Using fewer descriptive words will reduce the number of misunderstandings.

3) Concise - The text needs to be short and to the point.



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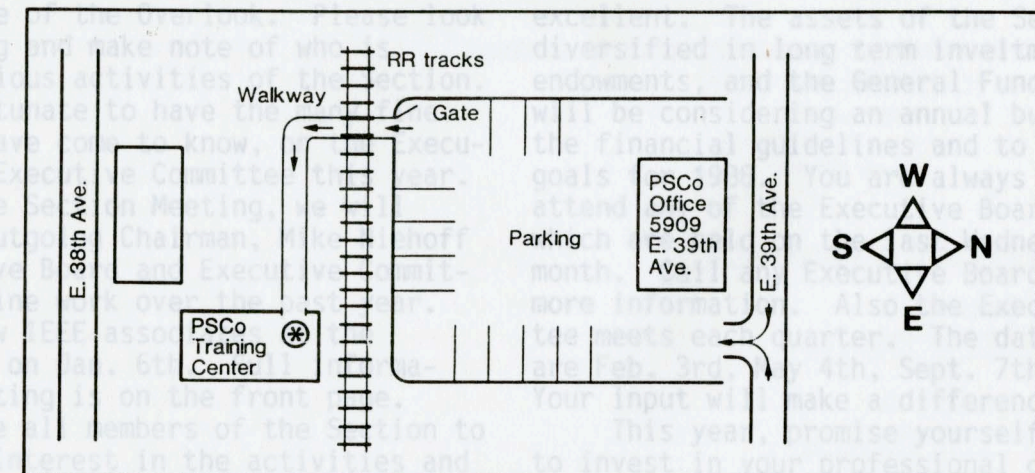
Tutorial on Symmetrical Components Theory and Application

Sponsored by the Denver Power Engineering/Industrial Applications Society Joint Chapter

Instructor: Pankaj K. Sen, PhD — Associate Professor of Electrical Engineering
University of Colorado - Denver

Dates & time: Saturday, April 9, 1988 8:00 a.m. - 12:00 p.m.
Saturday, April 16, 1988 8:00 a.m. - 12:00 p.m.

Location: Public Service Company of Colorado
38th Avenue Training Center
(parking available in 5900 E. 39th Ave. parking lot)



For further information, contact Jeff Selman at 452-6111 ext. 118

Registration form

Name _____
Address _____
Company affiliation _____
Work phone _____
Home phone _____

Cost of Tutorial - \$85.00
Check payable to:
IEEE PESS/IAS
Send check with registration form to:
June Jones
2021 Washington
Golden, CO 80401

Registration deadline is March 11, 1988

In February, IEEE will continue this Professional Development Program with a program on how to make oral presentations. The Denver Section is purchasing Home Study Courses on both written and speech communications which will be available for IEEE members on a no cost, first request basis. Contact Bill Whipkey, PACE Chairman, at 427-2411.

Holiday Greetings! As this is the first RockIEEE Overlook issue of the new year, I wish you a healthy and prosperous New Year!

The new Executive Board and Executive Committee will be introduced to the Section at the Denver Section meeting on Wednesday Jan. 6, 1988. The members of the Executive Board are Henry Rackley - Treasurer; John Reesy - Secretary; Gordon Lee - Vice Chairman, Student Activities; Gary Peterson - Vice Chairman, Member Services; Keith Henderson - Senior Vice Chairman, Programs; and myself. The numerous members of the Executive Committee are listed on the back page of the Overlook. Please look over the listing and make note of who is guiding the various activities of the Section. I feel very fortunate to have the many fine individuals I have come to know, on the Executive Board and Executive Committee this year.

Also at the Section Meeting, we will recognize the outgoing Chairman, Mike Niehoff and his Executive Board and Executive Committee for their fine work over the past year. Join your fellow IEEE associates at the Section Meeting on Jan. 6th. Full information on the meeting is on the front page.

I encourage all members of the Section to take an active interest in the activities and operation of the Section. If you desire to grow professionally, have a challenging

As in previous years, the Executive Board has adopted goals for the Section. For 1988 these goals are:

1. Increase IEEE visibility in the community
2. Increase IEEE member participation
3. Utilize the RockIEEE Overlook to report on Denver Section and Chapter activities
4. Develop a sound 5-year financial plan based on increasing revenues and a balanced budget.
5. Support continuing education programs both local and national
6. Develop closer coordination between section and societal chapters and coordination between the Denver Section and chapters with the Pikes Peak Section
7. Maintain improvement of liason with Student Branches
8. Continue to develop a liason program with industry and government employers
9. Increase membership in IEEE and societal chapters
10. Support programs to improve pre-college math and science education.

If you participate and join your fellow IEEE Section members on the Executive Board, the above goals will be attained.

The financial health of the Section is excellent. The assets of the Section are diversified in long term investments, several endowments, and the General Fund. The Board will be considering an annual budget to meet the financial guidelines and to support the goals for 1988. You are always welcome to attend any of the Executive Board meetings which are held on the last Wednesday of the month. Call any Executive Board member for more information. Also the Executive Committee meets each quarter. The dates this year are Feb. 3rd, May 4th, Sept. 7th and Nov. 2nd. Your input will make a difference.

This year, promise yourself to take time to invest in your professional growth and participate in the activities of the IEEE Denver Section.

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Keith N. Henderson

(303) 428-1655



(303) 288-0751
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THE INSTITUTE of ELECTRICAL and ELECTRONICS ENGINEERS - DENVER SECTION

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TREASURER

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SOCIETY CHAPTER CHAIRMEN

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Electro-magnetic Compatibility - **Andy Anderson**, Martin Marietta Aerospace, 971-6422
Power Engineering - **Kenneth McBryde**, Colorado Ute Electric Association, 1-249-4501
Joint Antenna and Propagation/Microwave Theory and Techniques/Geoscience and Remote Sensing - **Hussain Haddad**, Ball Aerospace Systems Division, 460-2114
Joint Communications/Vehicular Technology - **John Hardzinski**, Martin Marietta Information and Communications Systems, 977-2972
Joint Computer/Information Theory - **Sandy Bish**, AT&T Information Systems, 538-4717
Joint Electro-magnetic Compatibility/Instrumentation Measurement - **Richard Groves**, Colorado School of Mines, 273-3677
Joint Power Engineering/Industry Applications - **Jeff Selman**, Tri-State Generation and Transmissions, 452-6111
Start-up Chapter, Laser & Electro Optics Society - **Arun K. Majumdar**, University of Colorado Denver, 556-2554

SUBSECTION CHAIRMEN

Black Hills - (Acting Chairman) **Dr. Larry Simonson**, Electrical Engineering Dept. South Dakota School of Mines & Technology, Rapid City, SD 57701, (605) 394-2459
Centennial - **Louis Thomas "Tom" Mills**, Hewlett-Packard Co., Fort Collins, CO 80525, 1-229-3737

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Conferences - **John Tary**, Tri-State Generation and Transmission Association, 452-6111
Professional/Industrial Liaison - **John Martin**, Public Service Company of Colorado (retired), 233-0023
Awards - **Michael E. Niehoff**, Public Service Company of Colorado, 480-6955
Nominations - **William B. Whipkey**, 427-2411
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Membership - **Herb Bass**, 530-7509
Educational Activities - **Pankaj K. Sen**, EE & CS Dept., University of Colorado Denver, 556-2872 or 556-2852
Pre-College Student Activities - **Dan Michaels**, 939-5139

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Michael E. Niehoff, 480-6955

RockIEEE Overlook

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THE MONTH AT A GLANCE

January 6
IEEE Section Meeting

January 8
Reliability Meeting

January 19
APS/MTTS/GRS Meeting

January 21
PES/IAS Meeting
CS/ITS Meeting

January 27
Section Executive Board Meeting

February 3
Section Executive Committee Meeting

TIME DATED MATERIAL

Published Monthly to inform members of local meetings, conferences
workshops and social, technical, educational and professional activities

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