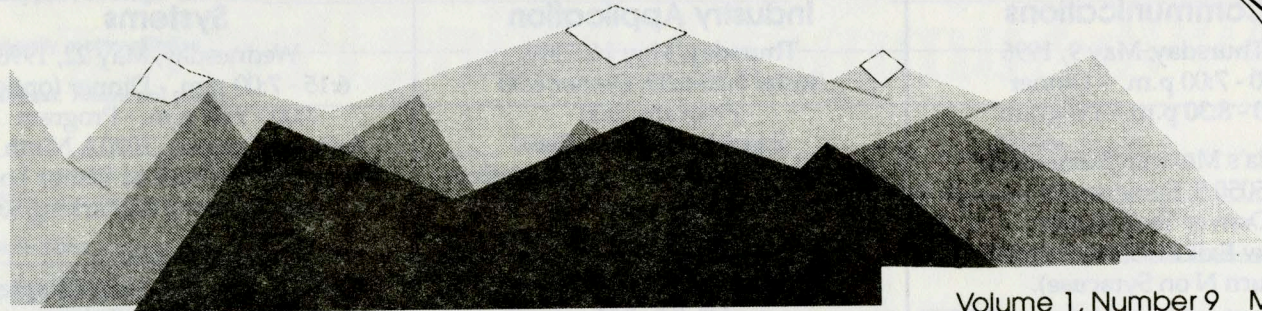


RockIEEE Overlook



Volume 1, Number 9 May 1996

All Chapters/Awards Meeting: Thursday, May 16, 1996

"What's Happening to the Ozone Layer and Who is Lying About It"

James C. Wilson, Department of Engineering, University of Denver

Atmospheric scientists agree that the levels of stratospheric ozone are decreasing. A main cause of the decrease is known to be chlorine released by humans in the form of CFCs. In this talk, the somewhat torturous pathway from your leaking automobile air conditioner to the Antarctic Ozone Hole will be traced. Mechanisms leading to ozone loss will be discussed. A tiny sample of the enormous data base establishing the validity of these mechanisms will be shown.

In spite of near unanimity among atmospheric scientists concerning the reality and causes of ozone loss, many Americans believe that these findings are somehow controversial. Arguments advanced by those opposing the scientific explanation of ozone loss will be examined and names will be named.

Please contact Linda DeLyser at 280-2717 by May 13, 1996 for dinner reservations and additional details.

Holiday Inn, 10 East 120th, Northglenn, CO

Thursday, May 16, 1996

Dinner: (optional) 6:30 - 7:30 p.m. Dinner Cost: \$16.00

Program: 7:30 - 9:00 p.m.

Chairman's Message

by David Richmond

This is the last Overlook issue until September. Your Executive Board will be using the summer months to plan and coordinate the fall schedule and it's already time to plan for the 1997 section activities. So you can see, the Executive Board will be busy over the summer.

The section Awards and All Chapters Meeting is to be held on May 16. This is the opportunity for the Section (you) to recognize those individuals that have contributed their time and talents in providing section and chapter activities for you. This is a good time to socialize with your fellow engineers and catch up on what's been happening. Call in your dinner reservations now.

When this is printed I will have attended the Region 5 meeting in Kansas City, along with two other officers of the Denver Section, Fred Jones and Ron DeLyser. The meeting provides section officers a chance to meet the regional officers and interact

with officers from other sections. We attend the region business meetings, separate meetings for area reports, training and planning sessions. The goal is to become more aware of the resources available, participate in the regional administration and bring back a few ideas on how to better serve the membership of the section. The Denver Section will host the meeting in the Spring of 1997.

The Denver and Pikes Peak section will host an important IEEE meeting November 1-4, 1996. The Sections Congress is an international meeting of section leaders from all the world Regions. The leaders will discuss topics of section operations, activities, and the technical and professional aspects of the IEEE. The Congress is a forum where local leaders speak as a collective voice of the IEEE membership. Issues generated at the Section Congress will have a major impact on plans made by IEEE leadership for the future of the Institute. Concerns that you may

have regarding activities or policies of the IEEE can be addressed at the Congress. Please advise your Section officers if you have concerns to bring to the Congress.

The delegates who will be attending may also be visiting our state or the USA for the first time. The organizing committee is planning local activities for them and their partners who may be travelling with them. Many may have special needs, such as help with language or custom. If you would like to help in making our visitors welcome, especially if you have language skills, contact your section officers to get plugged into the program.

To all - have an enjoyable summer and we will be back in September.

RockIEEE Overlook
Official Publication of the
IEEE Denver Section
1834 Fillmore Ct., Louisville, CO 80027
Published Jan. - May, Sept. - Nov.

Meetings

Joint Vehicular Technology & Communications

Thursday, May 9, 1996
6:00 - 7:00 p.m. - Dinner
7:00 - 8:30 p.m. - Program

Garcia's Mexican Restaurant
5050 S. Syracuse St.
Denver Tech Center
(Bellevue Exit #199, east one block,
turn N on Syracuse).

Speaker

Jay Jacobsmeyer
Pericle Communications Co.
"Why is There So Much Static on My
Cell Phone? Mobile Radio Wave
Propagation"

Wireless communications is the
fastest growing segment of the indus-
try. Current wireless networks lack
high bandwidth and quality of wire-
line channels. Jay addresses the
capacity limits of mobile radio and
discusses current and projected mar-
kets for cellular radio, wireless data
and PCS services.

Call David Iliff at (303) 757-1797
for additional details.

Lasers and Electro-Optics

May 23, 1996
7:00 p.m. Refreshments,
7:30 p.m. program
NIST, Room 1107
325 Broadway, Boulder, Colorado

Speaker

Steven Block
OSA Eastman
"Using Optical Tweezers to Study
Biological Motors"

Call Kevin Keilbach at 673-1349
before meetings to confirm times and
location.

Joint Power Engineering & Industry Application

Thursday, May 16, 1996
Social 5:30-6:30 Dinner 6:30
Program 7:00
Brooklyn's Sports Bar
2644 W. Colfax Ave. (1 block south of
McNichols Arena and Mile High)
Dinner Fee: \$12.00 (Students free)

Speaker

Dr. P.K. Sen
University of Colorado
"Understanding Transformer
Overloading"

Note: An open Election of
Chapter Officers will be held at this
meeting. Current Nominees are:

Secretary - **Robert Randall**, Coors
Brewing Co.
Treasurer - **Roya Brown**, MKK
Consulting Engineers
Vice Chair - **Trevor Pfaff**, Peak Power
Engineering
Chair - **Ben Carr**, EMC Engineers

Please call Barbara at Peterson
Company (303) 388-6322 for dinner
reservations by May 14.

EMC

June 11, 1996
7:00 p.m.
NIST, Room 1105
325 Broadway, Boulder, Colorado

Speaker

To be determined

Call Patrick Richardson, (303) 682-
6672; Fax (303) 682-6672 or George
Trejo (303) 350-4113; Fax (303) 350-
5382 for more information.

Aerospace & Electronic Systems

Wednesday, May 22, 1996
6:15 - 7:00 p.m. - Dinner (optional)
7:00 - 9:00 p.m. - Program
Auraria Campus, 1020A Ninth St.
Park, Denver (Park in Visitor Lot G)
Cost: Dinner \$10, Parking \$3

Speaker

John C. Tsucalas, AES Chapter
"Chapter Organization,
Goals and Activities"

The Denver Aerospace and
Electronic Systems Chapter has been
inactive for some time. This is a call
to all members of the AES society,
and unaffiliated IEEE members, who
would like to be involved in a new
and interactive AES Chapter.

This meeting was originally
scheduled for March 28th, but there
was an insufficient response to con-
vene the initial meeting. If we are
going to have an AES Chapter, atten-
dance at this meeting is vital, please
try to make time for this event.

The meeting will be an open dis-
cussion of chapter plans including
officer nominations, meeting types,
places and schedules, survey of tech-
nical interests, programs for students
and new engineers, and ad-hoc com-
mittee goals. Please bring your ideas,
they are important for us to develop
a plan that is meaningful to you, the
AES members.

Please call John Tsucalas at (303)
798-5769 by Monday, May 20, 1996,
for additional details and to confirm
the meeting time and location. Your
early response will help to establish a
meeting quorum.

MEETING ADVANCE REGISTRATION FORM

1996 IEEE Power Engineering Society Summer Meeting - Denver, Colorado

July 28 through August 1, 1996

Name as appears on badge: Last Name _____ First Name _____

Firm, University, or other affiliation _____

Mailing address: number and street _____

City _____ State _____ Country _____ Zip Code _____

Phone No. _____ FAX No. _____ IEEE Membership Number _____

PES Chapter Name _____ Companion's name (if registering) _____

Check Appropriate Boxes

a. () Utility c. () Consultant e. () Manufacturer g. () Marketing i. () IEEE Officer k. () Committee Chair
b. () School d. () Session Chair f. () Government h. () Author j. () PES Officer l. () Panelist

Status (Check only one)	Advanced (Postmarked by July 1, 1996)	On-Site (After July 1, 1996)	Total
IEEE Member	\$195.00	\$245.00	\$ _____
Non-IEEE Member	\$325.00	\$375.00	\$ _____
Companion	\$ 30.00	\$ 35.00	\$ _____
Other: () Life Member () Life Member Spouse () Media () Students (Must register to be admitted)			N/C

REGISTER EARLY FOR EVENTS LISTED BELOW

Tickets available on first-come, first-serve basis. No refunds provided on events.

Special Events (Enter number of tickets. Available for registrants only.)

Tuesday 7/30	12:00 noon	Awards Luncheon	Tickets x \$35	\$ _____
Wednesday 7/31	12:00 noon	Student Industry Lunch (Registered Students Free)	Tickets x \$35	\$ _____
Wednesday 7/31	6:30 pm - 10:30 pm	Dining with the Dinosaurs	Tickets x \$45	\$ _____

Companion Events (Enter number of tickets desired)

Monday 7/29	9:00 am - 1:00 pm	City Tour: tea & scones at Molly Brown house	Tickets x \$30	\$ _____
Tuesday 7/30	9:00 am - 3:00 pm	Boulder/Flatirons Tour (lunch on your own)	Tickets x \$25	\$ _____
Tuesday 7/30	10:00 am - 4:00 pm	Central City Casinos Tour (lunch on your own)	Tickets x \$28	\$ _____
Wednesday 7/31	9:00 am - 3:00 pm	A Taste of the Rockies w/lunch Mt. Vernon Country Club	Tickets x \$40	\$ _____
Wednesday 7/31	9:00 am - 3:00 pm	Georgetown Tour w/ \$10 Lunch Certificate	Tickets x \$40	\$ _____

Technical Tours (Enter number of tickets desired)

Monday 7/29	12:30 pm - 4:30 pm	NREL Tour	Tickets x \$15	\$ _____
Monday 7/29	12:30 pm - 4:30 pm	Golden Triangle Tour	Tickets x \$15	\$ _____
Monday 7/29	12:30 pm - 4:30 pm	Neighborhood/GIS Sub Tour	Tickets x \$15	\$ _____
Tuesday 7/30	8:30 am - 12:30 pm	Denver International Airport Tour	Tickets x \$15	\$ _____
Tuesday 7/30	12:30 pm - 4:30 pm	Neighborhood/GIS Sub Tour	Tickets x \$15	\$ _____
Tuesday 7/30	12:30 pm - 4:30 pm	Golden Triangle Tour	Tickets x \$15	\$ _____
Tuesday 7/30	6:30 pm - 10:30 pm	Coors Brewery Tour	Tickets x \$20	\$ _____
Wednesday 7/31	8:30 am - 12:30 pm	Denver International Airport Tour	Tickets x \$15	\$ _____
Wednesday 7/31	12:30 pm - 4:30 pm	NREL Tour	Tickets x \$15	\$ _____
Wednesday 7/31	12:30 pm - 4:30 pm	Golden Triangle Tour	Tickets x \$15	\$ _____

Tutorial (In addition to registration fees)

Wednesday 7/31	8:00 am - 4:30 pm	Artificial Neural Networks w/Applic. to Power Systems	() \$125.00	\$ _____
Thursday 8/1	8:00 am - 5:00 pm	Optimal Power Flow: Solution Tech., Requirements/Challenges	() \$125.00	\$ _____

TOTAL REMITTANCE (Must be in U.S. Dollars, drawn on U.S. Bank): Checks Payable to: IEEE/PES Summer Meeting \$ _____

Method of Payment (check one): () Check () VISA () Mastercard () American Express

Cardholder Name on Card _____

Card Number _____ Exp. Date _____

Authorized Signature _____

MAIL REGISTRATION TO:

Northwest Rendezvous
11700 S.W. Ashwood Ct.
Tigard, OR 97223 • USA

OR

FAX to 503-579-5098
(Credit Card Payments
only)

Registration and ticket purchases will be confirmed if mailed and paid for by July 1, 1996.

General & Technical Information: Paul Meisel, Registration Chairman: 9:00 am to 5:00 pm Mountain Time: (303) 673-9930

Jacobson Myers
And Associates Inc

Linda Jacobson, President
Tel: 303.499.0764
E mail: lindaj@csn.org

MS Windows
• Visual C++ Training
• Consulting
• Development

We teach beginners who
are experts in their field™

Inspired writing, editing, and design
for all of your technical
communications.



telephone: 303.762.8934
http://www.mt-muse.com/home/
info@mt-muse.com

D.L. HEISEY & CO., INC.
BUSINESS VALUATIONS SERVICES
MERGERS, ACQUISITIONS & DIVESTITURES
FINANCING, ADVISORY SERVICES & CONSULTING

Susan L. Heisey, MBA, CPA
President

8566 Lakeview Drive
Parker, Colorado 80134-5916
Telephone 303.840.2875
Facsimile 303.840.2875

Members of the AICPA, Colorado Society of CPAs, American Society of Appraisers, Alliance of Professional Women

1996 Summer Meeting Preview

The 1996 IEEE Power Engineering Society Summer Meeting will be held July 28 through August 1, 1996 in Denver, Colorado. Every aspect of the electric power industry is being challenged to find new efficiencies, enhanced customer options, improved reliability and safer operations. The 1996 Summer Power Meeting will bring engineers from around the world to participate in a technical forum dedicated to these high-profile energy issues. The technical program will include panel discussions, technical paper presentations, poster sessions, tutorials, inspection trips, and Power Engineering Society technical committee meetings. Technical topics in the areas of power systems engineering, electric machines, power generation, transmission, substations, distribution, resource planning, automation, communications and power engineering education will be presented.

The 1996 Summer Meeting will begin on Sunday, July 28. Welcoming and registration activities will be headquartered at the Adam's Mark Hotel in downtown Denver. A welcoming reception for registered conference attendees will be held in the Adam's Mark Grand Ballroom from 4 to 6 p.m. Sunday evening. This reception affords an excellent opportunity to renew acquaintances and meet new participants as a guest of the Power Engineering Society. The Plenary Session on Monday morning will kick the technical program off as a precursor to more than 200 technical sessions, tutorials and panel discussions. A general membership meeting and PES Awards Luncheon are also scheduled. Special programs for engineering students and companions of registered attendees are planned.

Following the Summer Meeting, PES Chapter Representatives and Chapter officers from around the world will be invited to IEEE's first Chapters Congress to be held Thursday, August 1 through Sunday, August 4 at the Hyatt Regency Hotel. Attendance at this event is by invitation only. Chapters Congress attendees are invited to attend the Summer Meeting and stay over for the Chapters Congress.

Location

Denver is considered a western city by many, but in fact, Denver is only 350 miles west of the geographic center of continental United States. Home to 2 million people, Denver is quickly earning a reputation as the economic, cultural, and shopping capital of the Rocky Mountain region. Denver is the largest city in a 600 mile radius and is a favorite destination for

Come see why "Energy Issues Are A Mile High" when you participate in the IEEE Power Engineering Society's technical and administrative activities in Denver from July 28 through August 1.

millions of visitors annually. At 5,280 feet above sea level, the "Mile High City" has a mild, dry climate. Denver's summer weather is predictably warm and dry, with sudden, short, and noisy afternoon thundershowers a possibility. Sightseeing possibilities in Denver are many, including the historic Larimer Square area and a bustling new LoDo area in Lower Downtown Denver adjacent to the uniquely new but old-fashioned Coors Field, home of the Colorado Rockies baseball team. Within a block of the conference hotels is the mile-long 16th Street Mall, which offers free shuttle buses along the full length of the downtown shopping, restaurant and business district. Denver offers an abundance of museums and a variety of performing arts theaters. Within a short walk of the hotels

are the Denver Mint, the gold-domed Colorado State Capitol, and the new Denver Public Library. Minutes from downtown, you'll find the Cherry Creek Shopping Center with Nieman Marcus, Saks, Lord & Taylor, and hundreds of other shops to satisfy your shopping needs. The Denver Zoo, Denver Botanic Gardens, and the beautiful Victorian Molly Brown House (home of the Unsinkable Molly Brown) are not far from downtown. The majestic beauty of the Rocky Mountains awaits a few miles west of Denver, including Rocky Mountain National Park and the Pikes Peak region.



Maroon Bells, several hours west of Denver, exemplifies the majesty of the Rocky Mountains

Gary Petersen is general chair of the 1996 Summer Meeting.

1996 Summer Meeting Preview

"Energy Issues Are a Mile High"

Come see why "Energy Issues Are a Mile High" when you participate in the IEEE Power Engineering Society's technical and administrative activities in Denver from July 28 through August 1, 1996.

The 1996 IEEE Power Engineering Society Summer Meeting will be held July 28 through August 1, 1996 in Denver, Colorado. Every aspect of the electric power industry is being challenged to find new efficiencies, enhanced customer options, improved reliability and safer operations. The 1996 Summer Power Meeting will bring engineers from around the world to participate in a technical forum dedicated to these high profile energy issues. The technical program will include panel discussions, technical paper presentations, poster sessions, tutorials, inspection trips and Power Engineering Society technical committees. Technical topics in the areas of power systems engineering, electric machines, power generation, transmission, substations, distribution, resource planning, automation, communications and power engineering education will be presented.

The 1996 Summer Meeting will begin on Sunday, July 28. Welcoming and registration activities will be headquartered at the Adam's Mark Hotel in downtown Denver. A welcoming reception for registered conference attendees will be held in the Adam's Mark Grand Ballroom from 4:00 - 6:00 p.m. Sunday evening. This reception affords an excellent opportunity to renew acquaintances and meet new participants as a guest of the Power Engineering Society. The Plenary Session on Monday morning will kick the technical program off as a precursor to more than 200 technical sessions, tutorials and panel discussions. A general membership meeting and PES Awards Luncheon are also scheduled. Special programs for engineering students and companions of registered attendees are planned.

Following the Summer Meeting, PES Chapter Representatives and Chapter officers from around the world will be invited to IEEE's first Chapters Congress to be held Thursday, August 1 through Sunday, August 4 at the Hyatt Regency Hotel. Attendance at this event is by invitation only. Chapters Congress attendees are invited to attend the Summer Meeting and stay over for the Chapters Congress.

1996 Summer Meeting General Chairman: Gary Peterson
Vice Chairman: Duane Torgerson

A registration form is included in this newsletter.

1996 Wyoming Space Grant Symposium

October 11, 1996

Wyoming Union
University of Wyoming
Laramie

Sponsored by the Wyoming Space Grant Consortium

The goal of the 1996 Wyoming Space Grant Symposium is to promote the exchange of results, ideas, and interests in the area of planetary and space science among researchers, industry, educators, students, and the public. All interested individuals or groups are invited to attend.

The Symposium will feature technical papers, poster sessions, exhibits, and discussion sessions by researchers and industry representatives, in areas such as:

**Remote Sensing
Environmental Studies
Aerospace Engineering
Image Processing
Satellite Communications
Education
Earth/Life Sciences
Atmospheric Sciences
Astronomy**

For more information contact:

Dr. Rex Gantenbein
Department of Computer Science
University of Wyoming
Laramie, Wyoming 82071-3682
(307) 766-4226 fax: (307) 766-4036
email: rex@uwyo.edu

T3 Systems

Thad Smith

We develop software and firmware for real-time measurement and control applications, targeting embedded microprocessors and PCs.

- Data Collection and Communications
- Motion Control, Custom Interfaces
- User presentation in DOS & MS Windows

Free estimates

(303) 449-3322

NOLAN LABORATORIES, INC.

Consultation, Design, Test and Manufacture

- Electromagnetics
- RF & Microwave
- Bioelectromagnetic Sensors
- Antennas
- EM/RFI
- Optics

James A. Nolan, MSEE
President

P.O. Box 567
Confier, CO 80433
(303) 838-0057 Phone/Fax

Students Win Top Honors

by Fred Jones, IEEE Chair-elect

Two students from the Denver Section took top honors in the West Area Student Paper Contest on March 16th. Stephen LaConte of Denver University placed first with his paper entitled "pH Control of Microalgae Using Simulated Power Plant Flue Gas" and Emarit Ranu of Colorado State University and Robert Runser of the University of Kansas placed second with their paper entitled "Microwave Nondestructive Surface Crack Detection and Tip Location in Metals".

Stephen, Emarit and Robert will present their papers at the Student Paper Contest during the Region 5 Conference in Kansas City on April 13th. Tim Horne of Texas Tech University, who took third place, will also present his paper.

Congratulations to all the participants and good luck in Kansas City!

Sections Congress '96 in Denver

by John Martin, Chairman, Local Organizing Committee

Sections Congress '96 (SC'96) will be held Friday evening, November 1 to Monday noon, November 4, 1996 at the Denver Marriott City Center Hotel. The Denver and Pikes Peak Sections are co-hosting SC'96 along with Region 5. Also, members from these Sections comprise the Local Organizing Committee.

SC'96 is the fifth in a series of highly-regarded meetings which are held every three years. Previous Congresses have been held at Boston, MA; Anaheim, CA; Toronto, Canada; and San Juan, Puerto Rico.

SC'96, which will be three days of work sessions and networking, has a triple focus. First, the hundreds of delegates, primarily Section Chairs from all ten Regions, will learn how to utilize the resources of the IEEE to maximize their effectiveness as IEEE volunteer leaders. Workshop and tutorial sessions will be held on Section Operations, Section Activities, and the Technical and Professional Aspects of the IEEE. Second, the Congress is the one major meeting sponsored by the IEEE which brings together the Institute's grass-roots leadership so that they can share ideas, concerns and solutions. Third, the Congress will be a forum where the Section Chairs and other local leaders speak as the collective voice of IEEE membership, expressing ideas and raising issues about how the institute can better serve its members, both now and in the future.

Your help in sponsoring SC'96 is very much needed. The sponsoring Sections agreed to raise \$50,000 locally to help offset SC'96 expenses. Although a vigorous financial campaign is in progress, your help is needed to meet this goal. If you are willing to seek a contribution from your company or organization, please do so. Solicitation materials and help can be obtained from John Martin at (303) 233-0023. Also, as SC'96 draws nearer, many students from the local universities will be asked to serve as Speaker assistants, and local members will be asked to serve as Speakers and Workshop Leaders. If you are asked, please accept and help make SC'96 a showcase for the members of the Denver and Pikes Peak Sections and Region 5.

**A must-have
book of selected
readings for
every working
engineer...**

CELLULAR RADIO AND PERSONAL COMMUNICATIONS SELECTED READINGS

edited by Theodore S. Rappaport

Here, under one cover, are 40 of the most useful articles by leaders in the field. You'll find key information on:

Fundamental system design
Speech coding • Cellular networking
Modulation techniques • Standards

1994/Softcover/520pp
List Price: \$39.95 • Member Price: \$34.95
IEEE Order No. HL5699-QBZ • ISBN 0-7803-2283-5

24 HOURS A DAY - 7 DAYS A WEEK

CALL 1-800-678-IEEE
(TOLL-FREE, USA & CANADA)
OR **1-908-981-0060**
OR **FAX 1-908-981-9667**



GLEN MCCLUSKEY & ASSOCIATES

C++ and Object-oriented Technology Consulting

- Moving Development to C++
- Custom Class Libraries or Programming
- Test Suite Development
- C++ Systems Programming

Glen McCluskey
glenm@glenmccl.com

Fort Collins, CO
(800) 722-1613

Metropolitan State College of Denver

Electronics Engin. Technology Bachelor of Science Program

Offering the following special classes Summer Semester

EET235 Advanced Technical Programming using C
Tuesday and Thursday 1730-1845
EET373 Process Control Systems
Mondays 1730-1910
EET374 Programmable Logic Controllers
Wednesdays 1730-1910

Please contact the Dept. for prerequisites and additional details
Phone: (303) 556-2503, Internet: SynhorsJ@MSCD.edu
Check our WWW page: <http://www.mscd.edu/~ballk/eet.html>

Section and Service Awards

Section and service awards will be presented at the All Chapters / Awards Meeting on May 16. The Denver Section will present the John Peebles Professional Award, Section Service Award, Outstanding Society Chapter Award, and Outstanding Student Branch Award.

The four awards named above are presented based on the following criteria.

The Professional Award is presented in the name of John Peebles to an individual who has demonstrated outstanding service and exceptional leadership and influence in the engineering profession. This award is made based on nominations solicited from the Denver Section and other professional societies in the Denver Section geographic area. The recipient of this award receives an engraved walnut and bronze plaque. This award is not necessarily presented each year.

The Section Service Award is presented annually to a Denver Section member who has provided exceptional service to the Denver Section over an extended number of years (usually in excess of 10 years). The recipient of this award receives a check in the amount of \$100 and an engraved walnut and bronze plaque.

Serving Colorado and The World

— Since 1885 —

- Power
- Mining & Metals
- Petroleum & Petrochemicals
- Electronics
- Aerospace & Defense
- Biotechnology
- Pharmaceuticals
- Hazardous Waste Management
- Food & Consumer Products
- Airports/Infrastructure
- Environmental

Raytheon
Engineers & Constructors

P.O. Box 5888
Denver, CO 80217
(303) 8432422

The Outstanding Society Chapter and Outstanding Student Branch Awards are presented annually to the Society Chapter and Student Branch which have demonstrated exceptional outreach to their members, including number and quality of technical meetings and tutorials, membership increase, student paper contest participation and quality and timeliness of meeting reports. Each of these annual winners receives a check in the amount of \$100 plus an engraved plaque.

IEEE Denver Reliability Society Presents the Colorado Software Reliability Symposium

May 10, 1996

Radisson Inn North

**"Building Reliable Software
Realistically"**

Registration: 9:00 - 9:30 a.m.

Program Starts at 9:30 a.m.

Price: \$49.00 (includes lunch)

Contact Juan Hernandez
at

Management Systems Technology, Inc.

(719) 260-5563

FAX: (719) 260-5529

Email: jmhdz@aol.com



Independent Testing & Engineering Services for Electrical Power Systems

Electro-Test, Inc. cordially invites you and your associates to attend our Open House on Thursday, May 30, 1996, 3:00 pm to 7:00 pm, located at 7100 N. Broadway (7-E), Denver, Colorado. Please join us for a festive evening of informative technical demonstrations and office tours. Complimentary buffet and refreshments will be served. RSVP to Mary Hopping by May 27, 1996. Phone (303) 427-8809 or Fax (303) 427-4080.

The Institute of Electrical and Electronics Engineers - Denver Section

Chair	Chair-elect	Sr. Vice Chair	Vice Chair Member Services	Vice Chair Student Activities	Secretary	Treasurer
David Richmond Raytheon Engineers & Constructors P.O. Box 5888 Denver, CO 80217 (303) 843-2465 d.richmond@ieee.org	Fred Jones EMC Engineers 2750 S. Wadsworth Denver, CO 80227 (303) 988-2951 (303) 985-2527 Fax	Ron DeLyser University of Denver Dept. of Engineering 2390 S. York St. Denver, CO 80208 (303) 871-2034 (303) 871-4450 Fax rdelyser@du.edu	John R. Adams Valley Lab Inc. 5920 Longbow Dr. Boulder, CO 80301 (303) 530-6503 (303) 530-6313 Fax jadams@pfizer.com	Cliff Alston Lockheed-Martin P.O. Box 179 Denver, CO 80201 (303) 971-9020 (303) 977-8428 Fax	W. Kevin Wright NEI, Inc. P.O. Box 1265 Arvada, CO 80001 (303) 431-7895 (303) 431-1836 Fax	David Edwards RMH Group 12600 W. Colfax Lakewood, CO 80215 (303) 239-2771 (303) 235-0218 Fax

Society Chapters - Fred Jones, (303) 988-2951
Awards - Darrell Sabatka, (303) 329-1547
Student Fund - Edward Pitchkolan, (303) 966-3707
Student Branch Activities - Trevor Pfaff, (303) 421-7910
Consulting Network - Tim Davis, (303) 466-1117, timdavis@tdcon.com
Professional Activities (PACE) - John Tsucalas, (303) 798-5769, jtsucalas@aol.com
Black Hills Subsection - Michael Pendo, (605) 394-5278
Centennial Subsection - Richard Sandige (307) 766-6181
Nominations - Bob Struthers, (303) 843-2235

Professional/Industry Liaison - Jeff Wilson, (303) 388-6322
Membership - Fareed Hasan, (303) 843-2347
Pre-College Student Activities - Gary Coblenz, (303) 388-6322
Educational Activities - open
Conference Activities - John Nelson, (303) 431-7895

RockIEEE Overlook Editor - Victor Cheung, (303) 751-0741, Fax: (303) 751-2581,
Publisher - Anita Wanberg, Phone/Fax: (303) 220-8042

Chapter Officers

Magnetics - Jim Cates, (303) 673-4126, Fax: (303) 673-6540
Joint Vehicular Technology/Communications - David Iliff, 757-1797
Joint Industry Applications/Power Engineering - Jim Houlihan, (303) 666-4525
Reliability - Sam Keane, (303) 673-5963
Laser & Electro-Optics - Kevin Keilbach, (303) 673-1349, kevink@ohmeda.com
Engineering in Medicine & Biology - Norbert Kaula, (303) 270-8973,
norbert.kaula@uchsc.edu

Joint Computer/Information Theory - "Shah" Bhatti, (303) 673-8915
Electromagnetic Compatibility - George Trejo, (303) 350-4113
Joint Antenna & Propagation/Microwave Theory & Technology/Geoscience &
Remote Sensing - Richard Geyer, (303) 497-5852
Aerospace & Electronic Systems - John Tsucalas, (303) 798-5769,
jtsucalas@aol.com
Components, Packaging, Mfg. Tech--Mike Erni, (303) 678-2437

**Please notify IEEE headquarters of any changes to your address and/or phone number by calling
1-800-678-IEEE (4333). We can not change this information in the Denver Area.**

The Institute of Electrical and Electronics Engineers



Denver Section
1843 Fillmore Ct.
Louisville, CO 80027-1122

Non Profit Org.
U.S. Postage
PAID
Denver CO
Permit No. 1993

Advertising Rates

Your business card or camera-ready artwork can be placed here for exposure to 4000+ engineers, scientists, and managers. Rates are as follows.

Ad Size	Single	Multi
Business Card	\$ 25	\$ 20
1/8 page	60	50
1/4 page	150	130
1/2 page	250	225
Full page	400	360
1 page insert	250	200

Send business cards or copy to Anita Wanberg, P.O. Box 4056, Englewood CO 80155-4056. Make checks payable to IEEE Denver Section.

04/01/96 DNVR
DAVID RICHMOND
2921 SO SIDNEY COURT
DENVER CO 80231