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The IEEE

Newsletter

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It is not necessary to inform the North Jersey Section when you change your mailing address. The NEWSLETTER and other section mailings use a list provided by IEEE's national headquarters in New York. This means the Section has no need to maintain a mailing list or addressing plates. Section membership records are changed when Headquarters notifies us.

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Primer On Kalman Filters

On December 15, 1983 the North Jersey Control Systems Society Chapter will present Professor Charles Giardina of Stevens Institute of Technology discussing "A Primer Of Kalman Filters."

About The Speaker

Charles Giardina is a professor of Electrical Engineering and Computer Science at Stevens Institute of Technology. He holds Masters and PhD degrees in both electrical engineering and mathematics. He is also a consultant to Singer (Kearfott Division).

Dr. Giardina is the author of numerous

articles in image processing and pattern recognition. His major areas of research includes artificial intelligence, image processing, pattern recognition and the constructive theory of functions.

Time: 8:15 PM, Thursday, December 15, 1983.

Place: Jersey Central Power & Light Co., Madison Ave. (Route 24) at Punch Bowl Rd., Morristown, N.J.

Pre-Meeting Dinner: 6:15 PM, AFTON, Florham Park, N.J.

Information & Directions: Dr. Daniel Tuey (201) 567-9004 (Days), (201) 784-0513 (Evenings); Kushal Jain (201) 265-2000; Frank P. Kuhl (201) 724-6488 (Days), (201) 663-1381 (Evenings).

Quota Based Cost Reduction

The January 24, 1984 meeting of the Engineering Management Society's New York/New Jersey Chapter will hear Glen W. Bodinson discuss "Quota Based Cost Reduction Programs."

About The Speaker

Mr. Glen Bodinson is Engineering Planning Development Manager for the Western Electric Company. Mr. Bodinson has held this position since April, 1982. Prior to this latest assignment, Mr. Bodinson held positions in quality assurance, quality con-

trol and material and accounts management. Mr. Bodinson has a BS from Purdue University; MBA from Michigan State University and is a Senior Member of the American Institute of Industrial Engineers.

Time: 7:30 PM, Tuesday, January 24, 1984.

Place: Willkie Memorial Building, 20 W. 40th Street. NYC.

Pre-Meeting Dinner: Swiss Bear Restaurant, 20 East 41st St., NYC.

Further Information And Dinner Reservations: Al Bottani (212) 393-3797; Barry Gourary (201) 783-5570; Harry Stokes (914) 696-6775.

PACE NEWS

Professional
Activities
Committee for
Engineers

By R. Tax

A Look Back & Forward

By the time you read this it will be very near the end of 1983. It's time to reflect on the past and perhaps consider the future. The United States Activities Board (USAB) and the Professional Activities Committee for Engineers (PACE) are just about 10 years old. We got off to a very bad start 10 years ago by being slandered by officials and members of IEEE that said or implied that USAB and PACE were protectionists and union oriented. This was, and is still, far from the truth.

I and the members I have met in IEEE's USAB and PACE are, I believe, devout company people that would prefer to see our industries thrive and not just survive. We also believe that by enhancing the careers of practitioners we will also enable them to better serve their projects, companies and industries. I hope you will keep this in mind when you think of USAB and PACE.

Our October PACE meeting, reported on in this issue, cost about \$200. Ten people showed up including two guest speakers, myself, the PACE chairman, one non-member and five section members.

The cost is \$10 per attendee and not really worthwhile when viewed from this point. A hundred members could have attended at no additional cost, and brought the cost per member down. Above all, they could have participated and shown their interest and support.

This PACE NEWS column cost \$160 per page or 3 cents per member per page. Sounds like a great buy, but is it? Mr. Feerst's Committee of EEs' newsletter has a circulation of 3000 and receives more letters and comments from readers in one issue than we get from our 5,275 members in two years. I have asked myself as others have, is it still worth it?

Project EGO provides Region I funds to cover the cost of this PACE News column. Our objectives were to: increase coverage of USAB/PACE activities, decrease lead time for Legislative Alerts; inform members of USAB/PACE goals, efforts and progress; and increase meeting attendance and membership participation. We were to monitor meeting attendance, Section election response

and Membership participation. About 110 members voted in our May Section election. It is needless to say anymore about lack of attendance at meetings. We have other sad stories about this subject.

The issue of member attendance and participation is, of course important to all of us. The members of the North Jersey Executive Committee are also concerned and so should our 5275 members be concerned.

At our November 2nd Executive Committee meeting, we spent a considerable amount of time discussing membership interests. This was not the first or only effort on our part and I don't think it will be our last. We still don't have the solution.

The solution to this problem appears to be in the hands of each and every member of our Section. All we can do at the present time is make each of you aware of the problem and hope that you will make at least some effort to participate.

On the National level, your lack of attendance and support leaves our Executive Committee and representatives without influence and makes their efforts almost totally ineffective.

We are at the end of 1983 and about to begin a New Year. Next year, 1984, can be a better year if you want and help make it better. Resolve to make 1984 your year to attend meetings, at least one, and show us you care. Resolve to be with us and counted as a participant.

Our meetings are always open to Members and other professionals. The names and telephone numbers of our Section Officers are listed on the masthead of this Newsletter. Give them a call even if its just to wish them your best.

Meanwhile, I'm sure the entire ExComm joins me in extending to you our **Best Wishes for a Happy Holiday and a Better New Year.**

Outside & Inside IEEE

On Friday, October 21, I chaired a PACE meeting which had Dr. David Lewis and Mr. Irwin Feerst, P.E. as our guest speakers. Both spoke for about 20 minutes each and then we continued with an open discussion with all attendees participating. Dave and Irwin answered questions and members aired their views.

The primary issue was how to influence and enhance the professional lives of the members and whether this can best be done within IEEE or by another society.

I believe a consensus indicated the following:

First, do not form a new society but work within and on the IEEE to solve problems and enhance the profession. Large numbers of members are required to muster the clout required and IEEE has them. IEEE is adaptable to change if issues are pursued but IEEE management does not focus on issues relevant to practitioners needs and more effort is required to direct their attention to the issues or replace them with new management and amendments to our present By-Laws.

IEEE is an organization run by volunteers and most members do not participate since most do not have the time. Break down IEEE duties so that more members may participate with less effort.

It was further resolved that IEEE should withdraw from AAES and that IEEE should not join or participate in any new umbrella organization since it will just be one more layer of management removed from the IEEE membership. An effort should be made to continue to sensitize IEEE's leadership to the needs and aspirations of the members and to increase member participation in National USAB and local PACE activities.

PES & IAS Meet Has Dual Topics

The New York & Long Island Section of the Joint Power Engineering Society & Industry Application Society will sponsor a January 19, 1984 meeting covering a technical discussion and a forum on the Power Engineering Society role.

Richard Hamilton of ASEA will "Review Current Application of AC Variable Speed Drives." In addition there will be a "Discussion On The Role Of Power Engineering Society On Long Island."

Refreshments will be served prior to the meeting.

Time: 7:30 PM, Thursday, January 19, 1984.

Place: Long Island Lighting Co., 175 E. Old Country Road, Hicksville, Long Island, Operation Bldg. No. 1, 2nd Floor, Rm. 210 (Obtain visitors badge at Guard Booth and park car in employee parking areas.)

Further Information: George Gross (212) 306-0431.

To Tour Battery Test Facility

The New York and Long Island chapters of the joint Power Engineering Society and Industry Application Society will sponsor a January 26, 1984 tour of the Battery Energy Storage Test (BEST) facility at Hillsborough, New Jersey.

BEST is jointly sponsored by the United States Department of Energy, the Electric Power Research Institute and Public Service Electric and Gas Company as a national test center for the testing of battery energy storage systems.

Batteries currently under test include zinc-chloride and an advanced lead-acid battery.

The Thursday evening tour will start at 7:30 PM and end at 9 PM. To obtain tickets and directions, please send a self-addressed stamped envelope to: Andy Montano, PSE&G Company, PO Box 2071, Princeton, N.J. 08540.

Medicine & Biology Potentials Of NMR

The January 4, 1984 meeting of the NY Metropolitan Chapter of the Engineering in Medicine and Biology Society will cover "Unique Potentials Of NMR In Medicine And Biology." The speaker will be Dr. Ephraim Feig, IBM Thomas J. Watson Research Center, Yorktown Heights, NY.

Time: 7:30 PM, Wednesday, January 4, 1984.

Place: Rockefeller University, York Ave. at 66th St., NYC, Tower Building, Rm. 301.

Pre-Meeting Dinner: 6:30 PM, Tower Cafeteria.

Further Information: Jeff Kriz (914) 769-6700 X-416; Nina Krause (212) 671-3831.



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Student Activities

By **STELLA LAWRENCE**

IN SEARCH OF THE CENTENNIAL STUDENT

One student and one alternate will be chosen from each region to attend the May 1984 Centennial festivities in Boston. If you have been active in branch activities, have ideas on how to celebrate the centennial, YOU could be chosen as the Region I Centennial Student. Perhaps some of your fellow Student Branch members qualify! Do not delay! Do not succumb to inertia! Ask your Branch Counselor to nominate YOU or QUALIFIED MEMBERS in your Student Branch. If you do not apply, you might miss the opportunity to attend and participate in a very interesting and enjoyable celebration!

All Branch Counselors are urged to send in their nominations as soon as possible.

ENTER THE IEEE STUDENT PAPER CONTEST

If an engineer lacks the communication skills to convey his ideas in a comprehensible manner, he is useless to mankind. Thoughts that are not conveyed due to the lack of effective communication skills have not advanced to the stage of true engineering.

Many of our engineering graduates possess only the mediocre communication skills. Engineers capable of effective expression are classified as gifted and unique. With a fair amount of practice and work, ALL engineering students can acquire the "talent" of effective communication. Many opportunities exist for the engineering student to practice and exercise these skills, one of the best is the IEEE Student Prize Paper Contest. Aside from the chance to win cash prizes, and to have your paper published, you have the stage on which to practice your communications skills, and to receive recognition.

Each year, METSAC (Metropolitan Sections: New York, North Jersey, and Long Island), sponsors the Metropolitan Student Council Prize Paper Contest. The papers submitted should cover technical and en-

gineering aspects of a subject reasonably within or related to the areas with which the IEEE is concerned, and with which the author is familiar, either from his courses, his hobbies, his summer work, or other sources. The work need not be original in engineering content, but should be original in treatment and concise in coverage of the author's contribution to the subject. Papers that did not win any previous prize may be resubmitted if the author is still eligible.

All schools in the New York, North Jersey, Long Island and Princeton sections of the IEEE with Student Branches of the IEEE are eligible.

Any undergraduate student who is attending an eligible school may enter the contest. A non-member of the IEEE must have completed an application for student membership in the IEEE prior to the presentation of his paper.

Formerly prizes have been: First Prize \$200, Second Prize \$100, Third Prize \$75, Fourth Prize \$50. There is also a junior contest for first and second year students. The best paper submitted from each Student Branch is usually awarded a school branch prize of \$45.

The deadline for paper submission is usually the middle of March.

FORTESCUE FELLOWSHIP

The Charles LeGeyt Fortescue Fellowship award is generally made to a full-time postgraduate student in electrical engineering. Preference is given to applicants about to begin their first year of graduate work. The recipient will be chosen on the basis of the Graduate Record Examination scores, transcripts covering college courses, and the information in the application and letters of recommendation.

The proposed work must be at an engineering school of recognized standing in the U.S. or Canada, and the student must have received his or her bachelor's degree by the time work under the fellowship would begin. Applications should be filed on the proper forms so that they reach the Fellowship Committee by January 15, 1984.

Application forms are available at many colleges or may be obtained from the Staff Secretary of the Awards Board, IEEE Headquarters, 345 E. 47th Street, N.Y., N.Y. 10017.

The fellowship, administered by IEEE was established in 1939 as a memorial to Charles Fortescue in recognition of his valuable contributions to the power industry. It is funded by the Westinghouse Electric Corporation, with which Dr. Fortescue was associated throughout his professional career.

OUTSTANDING BRANCH COUNSELOR/ ADVISOR AWARD

Entry Deadline: February 28, 1984

Student Branches/Chapters nominate their Counselor/Advisor with written essay, petitions, and letter of recommendations. Up to ten winners, each receiving \$500 and certificates. IEEE Student Services, 445 Hoes Lane, Piscataway, N.J. 08854.

IEEE FELLOWSHIP IN ELECTRICAL HISTORY

Entry Deadline: February 15, 1984

Fellowship of \$8,500 and up to \$2,000 additional for tuition and fees for one year of full-time graduate work in the history of electrical engineering and technology at a college or university of recognized standing. Identification and description of a research project of value is an important part of the application procedure. The fellowship is made possible by a grant from the IEEE Life Member Fund and is awarded by the IEEE History Committee. Director, IEEE Center for the History of Electrical Engineering, 345 East 47th St., N.Y., N.Y. 10017.

COMPUTER SOCIETY RICHARD E. MERWIN SCHOLARSHIP

Entry Deadline: March 18, 1984

Four \$3,000 (each) scholarships for one academic year. Graduate, senior, and junior students in computer-related engineering fields and active in their IEEE Computer Chapter are eligible. Executive Secretary, IEEE Computer Society, P.O. Box 639, Silver Springs, MD. 20901.

NEW YORK INSTITUTE OF TECHNOLOGY

The New York Institute of Technology Student Branch has elected the following officers for the 1983-84 academic year:

Chairman: Wesley Cruickshank
Vice-Chairman: Antoine Jeffrey
Treasurer: Mario Madrigal
Secretary: Murielle Jourdain
IEEE Counselor: Dr. S. Maurer

IEEE GROUP INSURANCE PROGRAM

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The "Newsletter" is anxious to publish news of Student Branch elections, and Student Activities. Send all information to your Student Activities Editor, Professor Stella Lawrence, Bronx Community College, W 181 Street and University Ave., Bronx, N.Y. 10453, or call (212) 220-6044.

PACE Sets Meeting Dates

The North Jersey Section Professional Activities Committee will sponsor its regular monthly meeting the third Wednesday of every month. Meetings will be held from 7:30 PM to 9:30 PM at Singer-Kearfott, Plant 3, 1250 McBride Avenue, Little Falls, N.J.

These meetings are open to all members and interested public professionals with refreshments free of charge.

Further Information: M. McLarin (201) 335-6847; H. Waters, (201) 785-6417.

FELLOWS AWARD

Nominations are now being solicited for members deserving election to the grade of Fellow in the IEEE.

What are the qualifications for a Fellow?

The Fellow grade is one of unusual professional distinction. This grade is conferred only by invitation of the Board of Directors upon a person of outstanding qualifications, experience, and achievement in the fields of electrical engineering, electronics, radio or allied branches of engineering who has made important individual contributions to one or more of these fields. A candidate must be a Senior Member at the time of nomination and must have been a member in any grade for at least five years preceding the year of election to Fellow.

Who does the nominating?

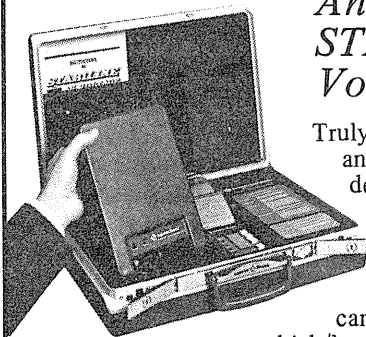
IEEE members do not apply for the Fellow Grade. This grade is conferred only by invitation of the IEEE Board of Directors. You, the IEEE members of any grade, must nominate candidates to the IEEE Fellow Committee, who, in turn, recommends a limited number of candidates to the Board of Directors. Although nominations are not due until April 30, 1984, it is especially helpful if they are received well in advance of the deadline.

What factors should be considered in preparing the nomination?

The nominations are evaluated according to eight criteria, listed in approximate order of decreasing importance:

- * Individual contributions as Engineer/Scientist/Originator, Technical leader, or Educator;
- * Evaluation by an IEEE Society (or more than one of them);
- * Tangible and verifiable evidence of technical accomplishment such as technical publications, patents, reports or published descriptions of products, facilities and/or services performed;
- * Confidential opinions of Fellow referencess who know of the work of the candidate personally (where possible, these should be associated with other than the candidate's own organization);
- * Service to IEEE (and AIEE and IRE);
- * Professional Engineering service other than IEEE;
- * Opinions of endorsers, and
- * Total years in the profession.

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