

Newsletter

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NEWSLETTER STAFF

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REPORT ALL ADDRESS CHANGES TO:

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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 IEFE'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.

FOR
1980-81
SECTION
OFFICERS
SEE
DIRECTORY
INSIDE



Congressman
Is Section
Speaker

Congressman Harold C. Hollenbeck, a member of the Science and Technology Committee will speak at the July 16th. meeting sponsored by the Professional Activities Committee. Congressman Hollenbeck will discuss the role of the Science and Technology Committee and its effect.

Harold C. Hollenbeck is the U.S. Congressional Representative of the Ninth District of New Jersey, an area including a major portion of Bergen County and Hudson County.

First elected to Congress in 1976,

Hollenbeck has served on the Committee on Science and Technology, the Committee on Banking, Finance and Urban Affairs and the Committee on Standards of Official Conduct. He also served as Vice President of the Republican 95th Congressional Club. As a freshman, he was the ranking Republican member of the Science, Research and Technology subcommittee, a post he retains. In this leadership capacity, Hollenbeck is active in overseeing the development of basic science and energy research. His legislative contributions to long-term energy and mineral policy planning have been praised by members of the business and science communities and by several federal materials studies.

The Ninth District legislator also serves as second ranking member of the Committee on Standards of Official Conduct. This is a sensitive assignment in which Mr. Hollenbeck is charged with reviewing allegations of misconduct by members of the House of Representatives. Integrity, objectivity and understanding of the Congress as an institution are essential prerequisites.

A lifelong resident of East Rutherford, Hollenbeck attended local schools and graduated from Fairleigh Dickinson University, Rutherford, New Jersey, in 1961 with a B.A. in English and Sociology. In 1964, he received his law degree from the University of Virginia Law School, and he began general law practice in 1965.

Called "Cap" by nearly everyone, Hollenbeck's nickname comes from his middle name, Capistran, after a Franciscan priest who was an old family friend and served at St. Joseph's Roman Catholic Parish. He is the father of one son, David, born in 1972.

With this meeting we hope to bridge the gap between the practicing engineer and our Congress. We will learn how to function with our representatives to build a better tomorrow.

PAC meetings are open to all engineers. Members and guests are invited. Refreshments will be served.

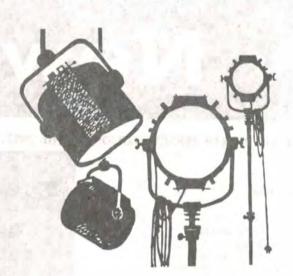
Time: 7:30 PM, Wednesday, July 16, 1980

Place: ITT Laboratories, Conference Center, 500 Washington Ave., Nutley,

N.J.

Pre-Meeting Dinner: 5:30 PM.

Call: Richard F. Tax, PAC Chairman, (201) 573-0387 for further information and dinner reservations.



SPOTLITE ON NORTH JERSEY 1979-1980 Chapter & Committee Report

Microwave Theory and Techniques Antennas and Propagation - One general meeting was held featuring Dr. James C. Wiltse who spoke on "Millimeter Waves for the 80's" which 14 people attended. This year's chairman was Hyman Goldman.

Reliability Group - Five general meetings and three executive meetings were held. In October, Edward T. Parascos of Con Edison spoke on "Reliability Engineering in the Electrical Power Generating Industry." A field trip to AT&T Long Lines in Bedminster was featured in November. At the February meeting, Dr. Charles Ehrenfreid spoke on "Reliability Analysis Center, RADC." In March a joint meeting was held with ASQC where Sheila Birnbaum spoke on "Product Liability." Mr. August Mundel presented "Reliability Impact on International Trade" at the April meeting. Sergei Bogaenko is this year's Reliability Group chairman.

Computer Group - Several meetings were held jointly with the Control Systems Society. The Computer Group recently agreed to merge with the Communications Society. New officers for the combined group have been elected for next year. Maitland McLarin was this year's chairman.

Control Systems Society - Four technical lectures were presented. In September, Terry O. Arney spoke on "Impact of Microprocessors on Control System Design," which 17 people attended. At the November meeting, David Waldman presented "The Function of Supervisory Control in Power Distribution," which 15 attended. Ten people attended in March to hear Floyd Hasselriis lecture on "A Dynamic Process Control Simulation used in Refuse-to-Fuel Process." In April, Louis Blane presented "Evaluating the Structure of Mini and Microprocessors to obtain an Optimal Process Control Design" with 18 in attendance. There was an optional pre-meeting dinner in Florham Park before each of the above. All lectures were held at Bell Labs, Whippany. The latest Control Systems roster included only 68 members in the North Jersey Section of which about 8 were students. John Van Savage was this year's chairman.

Power Engineering Society - Seven meetings were held and one had to be cancelled. Total attendance for the year increased about 50% over the previous year, for a total attendance during the year of 282. The year was started with a tour of AT&T Head-quarters in Basking Ridge in September. In October, there was a presentation on the Three Mile Island Rebuild. A tour of the McGraw-Edison Battery Facility was given in November and a tour of the Pirelli Solid Dielectric Cable Plant was taken in January. In March, the annual Past Chairman's Dinner took place with a speaker on "Financing a College Education." A Russian Travelog was presented in April. Wind Turbine Electric Generators were the topic of the May meeting. Gerard Barton was PES chairman this year.

Engineering Management Society - The Metro New York/North Jersey chapter of the Engineering Management Society was formed during the year. They held three general

meetings. Mr. John Barker discussed techniques for improving white collar productivity, specifically the engineering disciplines. Mr. Trevor Clark demonstrated ways of improving and motivating creativity within the engineering community. Mr. Walter Glomb presented the key ingredients for successfully managing a military R&D contract. Jack Jatlow was the group's chairman this year.

Industrial Applications Society - This chapter was newly formed in North Jersey this past year. They held two general meetings. Mr. Kao Chen presented "Light Sources and Applications" to 10 people. In April, Mr. Gary Schmidt spoke before 16 people on "Programmable Controllers for Industry." Gerald Bellsey was this year's chairman.

Communications/Computer Chapter - This group formed as the result of renewed interest in the Communications Society this year. This group had two general meetings in April. The first featured Mr. James Morgan speaking on "Integrated Voice," which 15 members attended. The second was a tour of AT&T Long Lines which 35 members and 20 guests attended.

Intersociety Relations - In spite of a diligent search for committee members, there has been no interest shown. The New Jersey Engineers Council has become inactive and returned \$125.23 balance (pro rata) from the '76, '77, '78 section contributions of \$225.00. Meyer Rosenthal was the chairman.

Awards Committee - Under the leadership of U. F. Gianola, the committee considered twenty nominees for Fellow awards and finally endorsed fourteen. The committee also aided nominators in the submission of four field awards.

Professional Activities Committee - Twelve PAC meetings were held with an average attendance of 15. The guest speakers were: Hans Cherney and Joel Synder - Candidates for Region I Vice President; Virginia Edgerton, N.Y.C. PAC Chairman; Steven Unger - Ethics; A. Burruano, CPA - Tax Savings; Robert Bruce - Career Maintenance; Donald Wilson - Professional Work Climate; Irwin Feerst - Patent Agreement; and E. Deja - IRA and KEOGH accounts. The maximum attendance was 54 (Tax Savings) and the minimum was 3 due to inclement weather. PAC provided the Section with 12 pages of PAC Articles on economics, working conditions and the USAB. Printing costs of about \$1650 for these articles were covered through Project E.G.O. by USAB funds. Richard Tax was chairman.

Computer/ Communications Joint Chapter Officers

Officers for the new combined Computer/Communications Chapter were elected at the May meeting. Ted Higginson will lead the new chapter for the 1980-81 year. Supporting officers will be Vice Chairman Howard Leach, Secretary/Treasurer Tom Hall, and Members at Large Mel Cassidy and John Orman.

Three Technicals have been planned for the coming year. The first, scheduled for November, will address troubleshooting techniques on computer/communications equipment. In February 1981, a panel discussion on Analog/Digital Switch and Networking is planned. For next April, a number of topics are under consideration: an ATT Long Lines Tour, an ESS tour and discussion, personal computers, and fiber optics communications.

The intent of the chapter is to cover both computer and communications with emphasis on the integration of these two fields.

A Chapter Executive Committee meeting is scheduled for September 17 to review and finalize the year's activities.

PROFESSIONAL ACTIVITIES

PAC NEWS

By R. Tax

Eyes Of The Beholder

Below is the text of a very significant resolution adopted by the Portland (Oregon) Section ExCom. It is important in that the IEEE Educational Activities Board has been unable, in spite of monumental efforts put forth by two different committees, to do any more than commend schools that have deleted "Engineering" from their technology degree titles.

Resolution

Approved by Portland Section
Executive Committee at their
December 3, 1979 meeting.
WHEREAS: The advent of the Bachelor
of Engineering Technology Degree has
created a misunderstanding by personnel departments and the public as to the
role of the Engineering Technologist
versus the role of the engineer, and

WHEREAS: This confusion is illustrated by a company [Boeing] recognizing the completion of the BET as qualification to be placed on their "engineering" payroll.

THEREFORE: Be it resolved, that the term "engineering" be eliminated from the Bachelor of Engineering Technology Title. The various options such as electrical or electronic may be added to the base title, i.e. Bachelor of Electronic Technology. And be it resolved that IEEE strongly endorse the policy that electrical engineering students must successfully pass the national council of engineering examiners, engineer in training examination (or equivalent) prior to receiving the BSEE.

Do you think the N.J. Section ExCom should consider a similar resolution? Let us know your feelings.

OPINION: EE Writes, "Why I Am Dropping Out Of The IEEE"

"A few years ago, during one of my long stretches of unemployment, my family was lacking major medical insurance, which IEEE offered. In order to get this insurance, I joined IEEE. Recently, my wife's employer supplied major medical insurance, eliminating this need as a reason for remaining in IEEE. The question then arose whether I should remain in IEEE for other reasons. Is IEEE helping me or hurting me?

"My pre-membership impression of IEEE was that it is a company union; it is controlled by the corporations that use engineers. My impression of IEEE after becoming a member, reading its periodicals, attending some meetings, listening to some debates, and noting the words and acts of its officers, strongly reinforced my initial view. IEEE usually works against my interests as an engineer by helping to keep the supply of engineers high and the wages low. IEEE officers frequently work against my interests as a consumer by siding with the corporations on such issues as energy and public safety. My dues and the fact of my membership is an apparent endorsement of its long-practiced policies and assent that it act as my representative in high levels of government and industry is not being used for my benefit.

"It has been stated that IEEE has accomplished some worthy technical programs such as its standards and its publications. However, when needed, standards have been produced by JAN and MIL and various organizations of manufacturers without dues from engineers. There are other worthy publishers of technical materials which function without such dues. Therefore, I can find no logic for continuing my membership."

Ben Fennick



Mr. Fennick is well known and respected in the North Jersey area as a highly qualified electronics circuit and system design engineer. He has worked in many companies as a direct employee, a consultant, and as a contract (job shop) engineer.

Continuing your membership in the IEEE or joining IEEE might be considered as another type of insurance especially for the practicing E.E.s that spent a lot of time and money to get their E.E. degree and earn a living in the field of engineering. As a member, you can at least take steps to prevent the IEEE from being detrimental to the practitioner.

The following 'PITCH', as I call it, might help.

"The Institute of Electrical and Electronics Engineers, founded in 1884, is the world's largest technical professional society, with a worldwide membership of 200,000 – 160,000 of whom live and work in the United States. Our members are volunteers with expertise in the electrical engineering aspects of energy, computers, communications, transportation, and biomedicine."

This 'PITCH' isused as an introduction by IEEE in almost all of its communications, including its communications with congress. Without actually saying so, this 'PITCH' implies 160,000 state side members that are Electrical and Electronics Engineers. It's very impressive and people in all walks believe it. Therefore, it works and thus, the IEEE represents E.E.s. whether E.E.s. agree with the representation or not. This pretty much holds true for all of the other so called engineering societies; ASCE, ASME, AIAA, etc. where few practitioners hold office.

In some regards, I must agree with Mr. Fennick, but unlike the other societies, we are making some changes. These changes are taking place only because more E.E. practitioners are becoming involved in the activities. Now their problems are being recognized. Changes will come only if we work for them.

Engineers should be made aware of the following:

In 1972 the United States Activities Board was formed and is concerned with the professional needs of the members.

22% of the American engineers' dues go to the USAB.

Professional Activities Committees (PACS) have access to these funds for use in the fight for engineers.

Many PAC chairman believe as engineers do and can help the engineers be effective.

IEEE membership costs less than \$1.00/week.

Members can vote on Section, Region and international matters.

Members can nominate candidates, revise the bylaws, direct IEEE efforts and projects, and participate and vote.

Non members have no choice and nowhere else to turn for help.

Engineers are trained not only to follow but to lead. It's about time they started. If engineers don't get the representation they want, then they must make an extra effort. This is not the time to quit IEEE. This is the time to join. This is the time to encourage others to join. Don't get turned off by the actions of some — get turned on by those who carel Richard F. Tax, Chairman, PAC

Your Opinion

Something we always had, but maybe we just didn't let you know the space could be made available to let Members express it. Well, times have changed. We will if you will. Give us the chance to give you the chance to express yourselves. Communication is the goal. Your message doesn't have to be fancy. It doesn't have to be typed. The only requirement is that it must be sent. Anonymity will be maintained if requested. Send your "OPINION" to PAC-OPINION, c/o Richard Tax, 51 Hawthorne Ave., Park Ridge, N.J. 07656.

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2nd Vice Chairman Frank Relotto 12 Thomas Street Clifton, NJ 07013 (201) 278-7759

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335-5796 H

Inflation and IEEE

Despite a surplus from 1978 operations of almost \$440,000, the outlook for 1979 was guarded. Growing fears of inflation and unemployment dictated conservatism in the operational plans for 1979. The Board of Directors, therefore, approved an operating budget deficit of \$900,000. This included a \$300,000 Contingency Reserve.

Through effective fiscal management, IEEE was able to withstand the effects of a 13.3 percent year-end inflation. We took advantage of our good cash position through investment in short-term money market instruments, and earned \$312,000 above the budget for interest income. At the same time, an effective membership promotion campaign was carried out in the regions and sections. Coordinated through staff efforts, it provided the Institute with an additional \$125,000 in dues receipts. These two major factors, coupled with the Board's decision not to commit the Contingency Reserve, reduced the 1979 operating deficit to only \$127,000.

The Institute's investment program provided a gain in market value which, coupled with dividend income, totaled almost \$518,000. Therefore, the General Fund Reserves of the Institute increased in 1979 by \$429,000. An amount almost identical with 1978's.

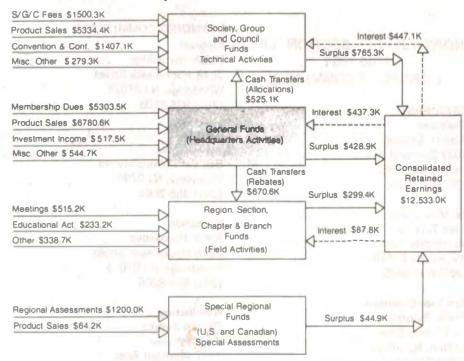
In addition to the specific financial results, several other important financial decisions were made in 1979 that will have lasting effects on the Institute's operations. In August of 1979, the Board of Directors approved a policy that limited the cumulative amount of budget deficits that could be submitted within a one, and a two and a three year period. This was a major first step in eliminating operating proposals that could seriously undermine the Institute's reserves.

The Board also approved the use of credit cards for payment of membership dues for members in Europe, South America, Asia and Africa. Individuals in these areas have been experiencing increasing difficulty in attempting to transmit funds to the United States creating a potential loss of membership.

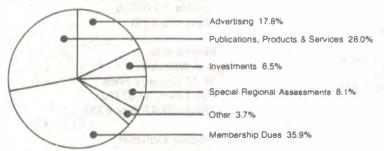
1979 also brought the introduction of a financial forecasting system to allow more effective financial planning throughout the year on an ongoing basis.

IEEE negotiated with the State of New Jersey through the State's Economic Development Administration for an \$800,000 construction loan at very favorable interest rates. This loan had provided the ability to construct a facility for an expanded warehouse, printing and distribution in Piscataway, New Jersey, adjacent to the existing Administrative Service Center. This facility will bring added jobs to the New Jersey area, and, at the same time, provide The Institute with a cost effective and modern distribution facility to handle the growing list of publications and products.

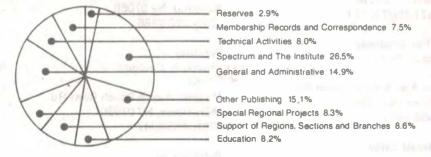
IEEE funds and how they interact.



Where the General Funds Came From

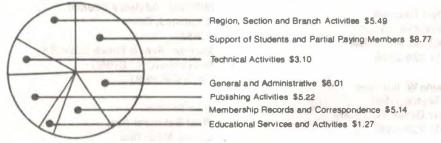


Where the General Funds Went



Where the \$35.00 Dues Go- 1979

Where your dues dollers go—the \$35 pie. U.S. and Canadian members, in particular, should be aware, that the graphs do not include thair special dues assessments on the principle that those assessments were approved by those Regions' members for special projecte of a supplementary nature, and any historical evaluation of IEEE's efficiency can be better approached without including those separately accounted monles.



Reprinted from "The Institute," June 1980