



The IEEE

# Newsletter

PUBLICATION OF THE NORTH JERSEY SECTION OF THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS

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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 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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430-8091

## Modern Production Facility For Metal Parts

The Controls Society will present a talk on an Integrated Modernized Production Facility for Metal Parts at its April meeting. In this talk, the component parts or subsystems of an integrated facility are discussed along with the philosophy of the performance and functional requirements of the subsystem. The integration of subsystems and operation is also discussed along with test procedures to evaluate performance of the integrated systems. Applications to the Armament industry will be presented.

The speaker, Mr. Meinert, graduated from Carnegie Institute of Technology in 1954 receiving a Bachelor of Science in Mechanical Engineering. He received a Masters Degree in Engineering and Science from Penn State University in 1973. He is presently a Supervisory Mechanical Engineer involved in the Modernization and Expansion of Metal Parts Production facilities involved in the manufacture of Artillery and Mortar Projectiles. Has worked in metal parts manufacture for the Government for twenty three years.

This talk will be presented at Bell Laboratories, Whippany, at 7:30 PM on

Thursday, April 20. Further information may be had by contacting either Gerry Uhrig, Bell Laboratories 386-6845 or Leonard Gardner ARRADCOM 328-3450.

## Automatic Distribution Control Systems.

The April meeting of the North Jersey Power Engineering Society will feature a discussion on Automatic Distribution Control Systems. The speaker will be Mr. Henry C. Youngster from Public Service Electric and Gas Company.

Mr. Youngster will discuss the history and application of automatic distribution control systems, current operation of PSE&G's new computer-controlled system and future trends in automated systems.

Hank is a Senior Staff Engineer at PSE&G currently in charge of supervisory controlled systems. He received his B.S.E.E. at Fairleigh Dickinson in 1968.

Time: 7:30 PM, Wednesday, April 19, 1978.

Place: Jersey Central Power and Light Company, Madison Ave. (Rt. 24) and Punchbowl Road, Morristown, New Jersey 07960.



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## Student Prize Paper Contest

The Student Activities Committee of the North Jersey Section of the IEEE is sponsoring a Student Prize Paper Contest.

Members of the Student IEEE Branches at the County College of Morris, Fairleigh Dickinson University, the New Jersey Institute of Technology, Stevens Institute of Technology, and Union County Technical Institute are eligible to enter.

Prizes to be awarded are:

First Prize: \$200  
Second Prize: \$100  
Third Prize: \$50

The contest will consist of two parts, a written report competition and an oral presentation competition. The deadline for submission of written papers is April 19, 1978, and the oral presentation competition is scheduled for May 4, 1978.

Entries will be judged on their originality, technical content, clarity of presentation, and correctness.

Students interested in entering the contest should obtain contest rules from their Student Branch Counselors.



## SPOTLIGHT ON NORTH JERSEY

Here's a little peek into the future. The North Jersey Section and its Executive Committee exist to help you get more out of your IEEE membership. A couple of months ago we talked about widening our circles and now Norm Bleshman has come up with a way to do exactly that.

Norm is our Junior Past Chairman and when he isn't working at his job as Principal Staff Engineer at Public Service or attending to his many duties as a School Board member in Bergen County, he tries to help us IEEE'ers.

This time he has come up with an idea for what he calls Technical Discussion Groups. In a previous life Norm was involved with a similar activity in the Power and Industrial Division of the New York Section and he reports that this activity is still flourishing there after 20 years.

The idea is that you could participate in informal discussions of quite specific topics that might be of interest to you. For example, in the general category of Engineering Management we might set up discussions of:

- Management Development & Training
- Management Policies, Methods, Procedures
- Systems Management
- Program, Project Management
- Technical Information
- Technology Transfer
- Technology Forecast
- Technology/Society Interaction
- Professional Develop. & Motivation
- Project Selection
- Organization

Norm thinks these groups would probably meet about four times a year. There would be a discussion, not listening to a lecture. Everyone would be welcome to attend and participate and there would be no need to be a member of a specific group.

This is a terrific idea! It gives everyone — fellows, members, students — a chance to meet people in their specific area of interest and to actively participate in discussions.

In the North Jersey Section we have people who are active in the following groups:

- G-3/17 Antennas and Propagation/Microwave Theory and Techniques
- G-5/18/28/29 Multigroup
- G-7 Reliability
- S-16 Computer Society
- S-19 Communications Society
- S-23 Control Systems Society
- S-31 Power Engineering Society

Within each of these categories there is the potential to set up several Technical Discussion Groups. But we don't intend to restrict the Technical Discussion Groups to just these categories. If we have people who are interested in discussing energy, CB radio or electro-optical systems we'll set up Discussion Groups on those topics, too.

It's going to be a big job to put all this together and we'll need your help. It won't be done all at once so we'll try to give you a progress update from time to time. You'll be hearing more about this but if you are interested and want to get things started now, drop me a note and let me know what topics you might be interested in.

D.G. Bathke  
Westinghouse Electric Corporation  
Box 3000  
1447 Chestnut Avenue  
Hillside, N. J. 07205



## "Surplus Of Engineers"

The North Jersey Section presents an Open Forum on the Engineering Surplus with Milton Alpern and Irwin Feerst as our distinguished guest speakers. Their discussions will be followed by an Open Forum with a panel of members from five local IEEE Sections.

All IEEE members and their guests are invited to attend and participate.

Milton Alpern will discuss the "Engineering Surplus — Its Causes and Ramifications". Mr. Alpern is a partner in the firm of Alpern and Soifer, Consulting Engineers, and has been in private practice since 1960. Prior to that, he was employed by several firms and for twelve years on the faculty of The Cooper Union School of Engineering.

He is a National Director of the NSPE and has been President of the NYSSPE. A few of his professional activities include his participation as a Past Member of the; Student Guidance Committee — NSPE, Task Force on Engineer Supply and Demand — NSPE, and Past Chairman Education Committee — NYSSPE.

He holds a BCE degree from Cooper Union and a MSCE from Columbia University and is registered in nine states.

He is the author of many papers including one most germane to our discussion — "Quantity Instead of Quality — A Sabotage of Engineering and its Education by 'Engineer Shortage' Propaganda?"

Irwin Feerst will address the "Engineering Surplus and the Other Indications". Mr. Feerst is a licensed Professional Engineer in the State of New York and an independent consultant in the areas of CRT displays, electromechanical servo systems, signal processing, medical electronics, radar analysis, and power supply design. Prior to 1969 he was employed by several corporations and for seven years an Assistant Professor of Physics and Electronics at Adelphi University.

Mr. Feerst received his BEE degree from City College of New York in 1951. He earned his MEE degree from N.Y.U. in 1955, and another MSEE degree in 1974.

Mr. Feerst is the founder, editor and publisher of a newsletter entitled the "Committee of Concerned E.E.s." This

publication is now in its sixth year. Through these efforts he has had his hand on the pulse of the engineer and is most in tune to the problems besetting the profession and the practicing engineer.

He has been and presently is a petition candidate for the position of President of the IEEE.

The following participants will also be available for comment and to answer your questions: Jack Andresen - Connecticut, Professional Activities Comm. (PAC) Chrmn.; Robert Bruce - Long Island Section, USAB Liaison; Alex Gruenwald - Chrmn. N.Y.C. Section; Jules Levine - Chrmn. Princeton Section; and Richard Tax - North Jersey PAC Chrmn.

For further information call Sid Bell at 201-487-8965.

Time: 7:30 PM, Wednesday, April 12, 1978.

Place: ITT Conference Center, 500 Washington Ave., Nutley, N.J.

Refreshments: Refreshments will be served.

Pre-Meeting Dinner: For information and reservations call Ralph Hernandez at 201-935-8205.

## Ford Plant Tour

A tour of Ford Motor Company's Mahwah, New Jersey Assembly Plant will be held on Monday, April 17, 1978 starting at 12:30 PM. The tour will follow the automobile through the assembly process. Tour group size is limited, so please apply well in advance to assure a place in the tour group. Send a stamped self addressed envelope to: A. Montano, Public Service Electric and Gas Co., Room No. 7341, 80 Park Place, Newark, New Jersey 07101 (Phone No. (201) 430-7709). Your reservation and information on the tour meeting place will be mailed to you.

## LI Petition Drive

The Professional Activities Committee of the Long Island Section IEEE is circulating a petition to place a new constitutional amendment on the 1978 IEEE ballot. This amendment would permit the voting members to elect directly the entire IEEE Board of Directors, thereby giving the membership greater influence in the running of

Institute affairs. Petitions and position papers are available from Robert Bruce, 15 Johnstone Road, Great Neck, N.Y. 11021.

## Nuclear Medicine

The May meeting of the Metropolitan New York Chapter of the IEEE Group on Engineering in Medicine and Biology will discuss "Nuclear Medicine". Mr. Richard Sano, Product Manager, Picker Corporation, Northford, Conn., will be the speaker.

Elections will take place at this meeting.

Time: 7:30 PM, Wednesday, May 3, 1978.

Place: Rockefeller University, South Laboratory, Room 204, 66th Street and York Avenue, N.Y.C.

Pre-Meeting Dinner: 6:00 PM, Tower Cafeteria, 64th Street and York Avenue, N.Y.C.

For Further Information: Harry Rice, (212) 554-7075 (The Roosevelt Hospital).

## LSI Josephson Technology

The Magnetics Chapter of the Princeton Section will hold a meeting April 27 on "An LSI Josephson Technology For High Performance Computers." The speaker will be Arthur Davidson, IBM Research, Yorktown Heights, New York.

Experimental high speed logic and memory circuits have been fabricated and tested in a new LSI technology which utilizes superconductivity and the Josephson effect. The extremely low power dissipation and high speed of this technology make it attractive for very high performance computing machines.

Time: 8:15 PM, Thursday, April 27, 1978.

Place: Auditorium, Administration Building, Allied Chemical Corp., Columbia Rd. & Park Ave., Morristown, N.J.

Pre-Meeting Dinner: 6:00 PM (5:30 for bar) Rod's 1890's Ranch House, Route 24 at Convent Rd., Convent Station, N.J.

Dinner Reservations: Jeannie Napolitano, (201) 455-2002.

For Information: P.F. Tumelty, (201) 455-4984 or R. Hasegawa, (201) 455-4307.

## Ford Plant Tour

North Jersey Section members are invited on a special field trip being held by the New Jersey Coast Section's Electromagnetic Compatibility Chapter. The field trip will include a tour of the Mahwah Ford Motor Company Assembly Plant and a Technical Presentation: "Getting the Glitches Out—The Automotive Manufacturer's Look at EMC" by Fred Bauer, Ford Motor Company, Dearborn, Michigan.

The May 11 field trip will include a one hour TRAM ride inspection of the assembly plant in operation and a one hour technical presentation. A Maximum of 80 reservations can be accepted on a first come-first served basis. Both the North Jersey and New Jersey Coast Section members (one guest per member allowed) are invited. Charter bus will provide round trip transportation with the pickup point for North Jersey Section members to be determined at a later date depending on response.

Unquestionably, the automotive environment is the world's worst for electrical components. Critics might say that the contrary demands for low cost and high reliability are self-imposed torture. This presentation will deal specifically with the four phases of electromagnetic compatibility (EMC) in an automotive world, i.e. radiation leaving the vehicle, the reaction between vehicular components, and the influence of the vehicle

upon occupants. Even as the need for bulk power in the vehicle becomes greater with inherent power line spikes and noise, the use of sensitive decision making, onboard electronics is growing significantly.

Will the glitches win? Come to the meeting to learn of present efforts to measure, reproduce, and design against the many threats encountered to electrical/electronic apparatus.

Fred Bauer is chairman of the Society of Automotive Engineers Radio Interference Committee. He has served as US negotiator of radio frequency agreements with the common market countries since 1964; He is a technical advisor to the US National Committee of the International Electrotechnical Commission for the work of CISPR (Special International Committee on Radio Interference). He has been with Ford for 30 years in electrical distribution and lighting, power supply systems, and radio engineering; presently he is a supervisor in charge of EMC and control of vehicular electrical load. Mr. Bauer is a registered PE, a member of Tau Beta Pi, a past president and Fellow of the Engineering Society of Detroit, and is a Senior member of IEEE. He has written articles on automotive electrical and RF interference. Time: 7 PM, May 11, 1978.

Place: Ford Motor Co., State Highway 17, Mahwah, N.J.

For Further Information: Don Heirman (201) 949-5535 or Bill Chriss (201) 949-6633.

## Display Seminar

A seminar on advances and display technology and measurement techniques will be held May 16, 1978 by the New York, North Jersey and Long Island Joint Chapter Instrumentation and Measurements.

The seminar which will be held at the New Jersey Institute of Technology will cover the latest advances in LCD, LED, vacuum fluorescence, and screen form plasma devices. New TV displays, color graphic automatic and outdoor displays will be among the application topics.

Instruments and Measurements of luminous intensity brightness, color temperature, color coordinates, Polarization as well as luminance standards, and the problem of QC correlation will be covered by experts in the field. Certain Mil Spec. requirements and compliance will be touched.

Outlines of papers and reprints of reference material will be made available to the attendees. The seminar will run from 9 AM to 4 PM and will include a round table discussion at the conclusion. Sufficient time will be allocated for questions and answers by all speakers.

Pre-registration by mail is \$20 for IEEE members and \$30 for non-members. Registration at the door will be \$25 for members and \$35 for non-members. Attendance will be limited and it is strongly urged that reservations be made early. For additional information contact: Mr. P. Emile: (201) 242-2600, Ext. 229 and Mr. J. G. Friedman: (201) 673-2500.

## Power Meeting Report



On February 22, 1978, Mr. Edward H. Ernst presented an interesting program to the Power Engineering Society, North Jersey Section IEEE, concerning advanced energy systems. Mr. Ernst, Manager of Energy Engineering for the Space Division of General Electric Company, discussed the technologies and systems engineering developed from the U.S. Space Program. He reviewed General Electric's participation in the solar program including solar heating and cooling, solar process heat, solar total energy, photovoltaics, and wind. In particular, he discussed a solar collector and gas heat pump system with industrial, commercial, and residential applications. Of added interest was his discussion of a two megawatt wind generator to be installed on the Blue Ridge Mountains.

In the photo, Mr. Ernst is flanked by Ralph Siciliano, program sponsor, and John Langenfeld, Power Group Chairman.



## "Bullseye War" Film

The North Jersey MTT/AP Chapter meeting for April will feature a "declassified" 16mm sound motion picture film on a history of Electronic Warfare (EW) and Electronic Counter-Measures (ECM) from WW II to present day.

The film entitled "Bullseye War" runs for 40 minutes and covers guided missile technology and some special footage taken during the recent middle-east conflict in 1973.

Please contact E.W. Niemiec, ITTDCE, Nutley, N.J. on (201) 284-2758 for directions and attendance reservations.

**Time:** 7:30 PM, Monday, April 17, 1978.

**Place:** ITT Auditorium, 500 Washington Ave., Nutley, N. J. 07110.

## Tour Of NJ Bell Morristown Office

The Multigroup Chapter of North Jersey IEEE is sponsoring a tour of a New Jersey Bell telephone switching office in Morristown, N.J. The office features two electronic switching systems, a #1 ESS, which is the primary local office system for urban applications, and a Traffic Service Position System (TSPS), which is the operator support system. The tour will consist of an overview presentation, an equipment tour, and a question and answer session.

Reservations required. Contact: Jerry Uhrig, Bell Laboratories, Whippany Road, Whippany, N.J. 07981, (201) 386-6845.

**Time:** 7:30 PM, Wednesday, April 19, 1978.

**Place:** 37 Maple Avenue, Morristown, N.J. (parking behind building).

## Circuits & Systems Meet

New methods and technologies for circuits and systems will be highlighted at the IEEE Circuits and Systems Society's annual symposium to be held at the Roosevelt Hotel, NY, NY during May 17-19. Several special sessions, regular sessions, and pre-symposium workshops will be devoted to such topics as surface acoustic wave and magnetostatic wave signal processing, microprocessors, fiber optics, charge coupled devices, switched capacitor filters, digital signal processing, active filters, macromodeling, large scale

systems, power systems, and radiation effects in electronics. 1978 ISCAS will host more than 400 authors from the USA and abroad who will present more than 200 papers during 3 technical sessions. With ELECTRO 78 in Boston the following week, this is an excellent opportunity for valuable technical interactions in two exciting cities. There is excellent public transportation between New York City and Boston.

General registration fees for the symposium are \$60 for IEEE members if advance registration is post marked before April 21, and \$70 at the symposium. For non-members the fees are \$65 and \$75 for those registering in advance and at the symposium respectively. Each registrant will receive a complete copy of the Conference Proceedings at the symposium. For further information contact Dr. Kenneth R. Laker, 1978 ISCAS Publicity Chairman, Bell Laboratories, Holmdel, N.J. 07733 or call 201-949-5075.

## Tomography Tour

Last October the Multigroup Chapter of North Jersey IEEE sponsored a very successful and interesting program on the mathematical basis of X-ray Tomography, the technique of producing an image of attenuation at each point in a plane slice through a body. Due to the response to this program a field trip has been arranged to the computerized tomography facility at Overlook Hospital in Summit. Come and see the theory reduced to practice!

For reservations and information contact Jerry Uhrig, Bell Laboratories, Whippany Road, Whippany, N. J. 07981, (201) 386-6845.

**Time:** 4:00 PM, Tuesday, May 2, 1978.

**Place:** Meet at Main Entrance of Overlook Hospital in Summit, N.J. Carpooling recommended due to parking problems.

## EXTRA!! EXTRA!!

The new 1978 Membership Information booklet is off the press.

Encourage your associates to join the IEEE by discussing the technical, educational and professional advantages of membership. Show them the IEEE publications you receive including Spectrum, The Institute and this Newsletter.

The IEEE represents all Electrical Engineers but only members can in-

fluence IEEE policies by taking part in elections and membership surveys.

For complete membership information, contact: Joseph W. Fink Jr., P.S.E.&G. Research Corp., 200 Boyden Ave., Maplewood, N.J. 07040, (201) 621-7500 Ext. 727 or Don Weinstein, Kulite Semiconductor, 1039 Hoyt Ave., Ridgefield, N.J. 07657, (201) 945-3000 Ext. 37.

## Multigroup Nominations

The Multigroup Chapter of North Jersey IEEE announces that officer nominations are open for the coming year. Multigroup consists of Systems, Man, and Cybernetics Society, Engineering in Medicine and Biology Society, Nuclear and Biology Society, Nuclear and Plasma Sciences Society, and Geoscience Electronics Group.

Feel free to nominate yourself.

Submit nominations to: Jerry Uhrig, Bell Laboratories, Whippany Road, Whippany, N. J. 07981, (201) 386-6845.

**DEADLINE** is May 1, 1978.

## TCF 78 - TCF 78 - TCF 78

The Trenton Computer Festival, the original amateur computer fest, will happen again on April 22-23, 1978, at Trenton State College, outside Trenton, N.J.

There will be two full days of speakers, demonstrations, commercial exhibits and flea market, and hundreds of door prizes. World known speakers will address a Saturday evening banquet.

Conference sections and forums are planned on many topics:

**Microcomputers for the Home**

**Amateur Radio**

**Education & Medicine**

**Consumer Applications of Micros**

**Computer Music**

**Robots**

**Graphics**

**Speech Synthesis**

**Establishing Standards**

**Computer Club Convention**

Admission will be \$4.00 for the two days (\$2.00 for students). The Saturday evening banquet will be \$9.00.

Free parking for 5,000 cars (but come early—9,000 people are expected to attend).

For further information call:

(609) 771-2487 or (609) 277-2063



# PAC NEWS

## Pension Answers

Believe it or not, as of February 28, 1978, exactly 100 of you wonderful people out there responded to the Questionnaire - Employee Pension Plan, published in the February 1978 Newsletter. We thank you.

The information on the returned questionnaires will be tabulated as soon as possible and will be reported to you in preliminary form. There is present a great deal of commentary (some respondents have appended an additional page of comment) which will be reported to you at a later date.

However, one preliminary release of information should be made now. In answer to Question No. 19 - Would you prefer that your employer did not provide a pension plan for you?, the first count indicates that 12% were not certain, and again, believe it or not 44% voted "no" and 44% voted "yes", - a dead heat. Of course, on almost every reply there was a qualification to the response in Question No. 19. Question No. 20 asked, Why?; and it will probably be that an analysis of the response to Question No. 20, when related to the tenor of response to the preceding 18 questions will really reveal why Question No. 19 was answered as it was.

I think it highly significant that there is apparently an equal split on Question No. 19, and, in a real sense, this may be very beneficial. For it indicates that the topic is eminently debatable, - and that is what we should have, a debate to reveal all the important issues. So:

**Announcing an OPEN DEBATE:**

**"Resolved That Federal Legislation Should be Passed which Shall Exempt All Technical Professional Employees**

**from Participation In IRS Qualified Employee Pension Plans."**

To be held at the ITT Conference Center, 500 Washington Ave., Nutley, N.J. on Wednesday evening at 8:00 PM sharp, April 19, 1978. All of you and your friends are welcome. Lets have a large turnout, and come early. Call (201) 736-5800 or 672-7940 for further information.

Saul Kozuck  
Pensions Sub-chairman, PAC  
North Jersey Section, IEEE

## IEEE Board Adopts Ethics Policy

New York City - The Board of Directors of the IEEE, at its recent meeting in February adopted policies and procedures to censure members for violations of the IEEE code of ethics, constitution, and bylaws and to protect members who may have jeopardized their employment by adhering to same.

The Board action amends Bylaw 112, establishing policy for discipline and support, as well as procedures for use by a new Member Conduct Committee of the Institute. This is the culmination of a number of years of effort by the IEEE United States Activities Board.

Under these procedures, an IEEE member can be expelled, suspended, or censured for cause. This may be conduct which is a "violation" of the constitution, bylaws, or code of ethics of IEEE, "or other materially unprofessional conduct."

On the other hand, if adherence to the IEEE code of ethics injures a member's economic status, a complaint can be submitted to the Member Conduct Committee. This committee, after screening the complaint, will report to the Institute's Executive Committee which

can "offer support to the member as appropriate to the circumstances."

The role of the Member Conduct Committee has been defined carefully by the Institute's Board of Directors.

Complaints against an IEEE member must be in the form of notarized affidavits containing specific information. The Member Conduct Committee has to prepare a preliminary report within 90 days. If, after investigation, a majority of the Committee finds the complaint non-frivolous and well founded, it will proceed, and the IEEE member to be charged with a complaint must be notified at least 60 days in advance of any hearing on the matter.

A mechanism is established for selection of a Hearing Board to be chosen from a list of IEEE members picked by the Board of Directors in advance of any complaint. The Hearing Board will come up with a recommendation which is acted upon by the Board of Directors.

A recommendation of expulsion or suspension requires the affirmative vote of two-thirds of the Hearing Board's members. A "censure" finding requires the affirmative vote of its majority.

As adopted by the Board of Directors, the procedures provide that no action against a member may be taken without review and approval of the entire Board. The Board may accept the recommendation of the Hearing Board or may lessen the severity of the action; it cannot increase the penalty.

The Board of Directors indicated that "in those circumstances where the Member Conduct Committee will be required, during the course of its investigation, to contact an employer or other non-members of IEEE, the Committee shall obtain a letter from the IEEE member waiving and releasing



any claims which the member may have against IEEE arising out of its investigation and subsequent action, if any. In the event it is necessary to contact an employer the Chairman of the Member Conduct Committee will transmit a letter to such employer disclaiming any intent or purpose to function as a union, labor organization or a collective bargaining representative." In all cases, the hearings will be held in executive session. Only after final Board action may results be published, and then only as directed by the Board.

## LA IEEE Council Opinion Survey

The Los Angeles Council IEEE Opinion Survey Final Report, a most unusual survey with equally remarkable findings, has recently been published. With over 2600 members responding, the survey results should appeal equally to engineers and employers as a milestone in exploring the attitude of the technical person towards the non-technical aspects of the engineering profession.

The report has been distributed to key IEEE leaders with the hope that the results would be routed through their IEEE associates and Professional Activities Committee. In addition, the report is being sent to other technical societies and interested groups who are also encouraged to review the survey results, and route to their appropriate committee for further analysis.

You should be forewarned that the report is not the conventional, clinical tabulation of results. Indeed, the Conclusions, Commentary, and Recommendations should stimulate every reader to analyze the questions and answers, and to review the detailed histograms that are presented in a 133 page appendix.

In the conceptual stage several years, the survey first sampled the large San Fernando Valley IEEE Section. Following this a refined survey was prepared to sense in greater depth the member attitude towards professional activities, collective bargaining, control of standards for entry into the profession, in addition to other often-mentioned issues.

Many questions concerned the member's present benefits, salary, length of employment, education, industry, among others. These questions were

important for establishing the correlation of attitudes vs several important characteristics. In fact, the strongest attraction of the survey may be the extremely comprehensive histograms illustrating the members's attitude vs the member's Section, age, education, industry, classification, title, and other relevant characteristics.

Copies of this 212 page report may be ordered from the Council Business Office only with appropriate prepayment. Los Angeles Council, IEEE, 999 North Sepulvada Blvd., El Segundo, CA 90245. Members must send \$10.00 for one copy at the member rate accompanied by a mailing label from an IEEE publication. Additional member copies may be purchased at the \$20.00 non-member rate. Please add 6% California Sales and Use Tax for all California Sales.

Daniel J. Love, Chairman  
Los Angeles Council

## Putting The IEEE's Salary Survey To Work

The 1977 survey of salary and fringe benefits conducted by the Institute of Electrical and Electronics Engineers affords an excellent opportunity to focus on the economic aspects of an engineering career. For one thing, EEs can use the survey as a guide in making decisions about job changes, relocations, and the like. It is to be hoped, too, that employers will take notice of it in evaluating their pay scales for engineers.

There also is something the institute should do. It is related to a statistic the survey failed to collect—the number of extra hours that EEs spend on their work, and the amount of spare time devoted to personal and professional improvement through advanced study, IEEE activities, and so on.

In point of fact, how important that word "profession" has become. Professionals are expected to work long hours and sacrifice for the cause, thereby advancing the fortunes of their profession. In the case of EEs, their employers benefit directly from these activities. However, some of them have taken advantage of this spirit to force EEs into uncompensated overtime. What's more, layoffs, age discrimination, and abuse of fringe benefit offerings continue.

On this score, the survey certainly drives home the need for portable

pensions. A large majority of IEEE members depend on pensions as a major source of income after retirement. Yet, whether they will even get the benefits is a real question. Vesting on the average takes 10 years, and pensions begin after 30 years of service, according to the survey. How many EEs can fill these requirements?

It has been important both for the advancement of EEs professionally and for the continued vitality of technology for engineers to shift jobs—go where the action is. The regular movement of engineers has been a key factor in making the U.S. the leader in technology, a lead which is now being challenged from overseas. Therefore, it would be unwise to cramp the coming and going of EEs because of pensions. Why should engineers be punished in the pocket book for moving with the shifts in technology?

It's time, then, that the IEEE gets hopping on a portable pension program. There are serious legal difficulties in devising a good portable pension, but they are not insurmountable. Just about everyone agrees on the need for such a program. In other words, the institute need not run yet another survey to find out if members want a portable pension. It is already clear enough that the members want and need this program.

It's also important for the institute to focus on other abuses to members. Many activists in the IEEE accuse the leadership of being tools of management and, therefore, more concerned with the welfare of the industry than of the members when interests conflict. Yet the issue of identifying and reforming the employment practices that take advantage of EEs is not a conflict. It is a step that would help members professionally and upgrade the industry in general.

The institute has taken pains to convince members that it is being responsive. So far most of this activity has been internal, with the exception of the effort against wage busting. Now it is time to convince members that the IEEE is member-oriented by more external efforts. Surveys have to result in more than the collecting and printing of statistics. After all, there are people attached to all those numbers.

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