

The PULSE

of Long Island

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The Institute of Electrical and Electronics Engineers, Inc.

May Section Meeting

OPEN TO THE PUBLIC

ELECTION OF 1975-76 SECTION OFFICERS

Rebirth of The Electric Car: All New and All Electric, or
A Converted Engine Car?

Long Island Section Officers

Chairman Thomas J. Schulkind
1st Vice Chairman Rod Lowman
2nd Vice Chairman Peter Lubell
Treasurer Duffy Gallegro
Secretary David R. Doucette

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Speaker: Robert Hickson
Marketing R&D Engineer
LILCO
Date: May 28, 1975
Time: 8 P.M.
Place: PINY Graduate Center
Route 110, Farmingdale,
New York
Pre-Meeting Dinner: Marciere
Route 110, Melville, N.Y.
at 6 P.M.



Mr. Hickson encourages the development of any and all storage systems which consumers can refill with KWHrs each night, in anticipation of time-of-day metering. Vehicle batteries and heat tanks are expected to be popular holders for discounted KWHrs.

Mr. Hickson is presently research coordinator for the Electric Vehicle Council's Work Vehicle Research Program on Long Island. He has forecast a 20% saturation of electrics in registered road vehicles by 1990 or 2000 AD at the latest. Timing will depend on auto manufacturers. First, they must concede that a market is developing; then, they will decide whether to put motors and batteries into cars designed for engines or to build automated assembly lines for all new designs.

With LILCO since graduating Brooklyn Polytechnic Institute in the 1930's, Mr. Hickson is a senior member of the IEEE, and a member of the Industry Applications Committee and Subcommittee on Non-guideway vehicles. He is also a member of the Eastern Solar Applications Committee that provides utility guidance to EPRI's Solar and Geothermal Group.

L. I. Section Officers Nominated For 1975-76

As originally announced in the April issue of the PULSE, a slate of officers to serve the L. I. Section for the coming year has been proposed by the Nominating Committee. The nominees are:

Chairman Rod Lowman
1st Vice Chairman Peter Lubell
2nd Vice Chairman Victor Zaurides
Treasurer Michael Sassano
Secretary Edward Fuller

The Committee consisted of Joel B. Snyder, Chairman, Arthur L. Rossoff,

Frank H. Williams, and Saul Rosenthal. Additional nominations may be made by submitting them in writing to the Section Chairman signed by at least 10 voting members, not less than 15 days prior to the date of the Annual Meeting.

Election of officers will be conducted at the Annual Meeting which is the regular May Section Meeting on May 28, 1975. Biographies and photographs of the nominees are presented on page 2.



Roderic V. Lowman
Chairman

Roderic V. Lowman is a consultant at AIL where he has been involved for a number of years on electronic reconnaissance, special receivers, space hardware like the Topside Sounder of the ionosphere, radar, and remotely piloted vehicles.

Following graduation from Ohio State University, he worked in IFF and home radio and television design at Hazeltine. He then accepted a teaching fellowship at Columbia while he completed his MS in EE.

After designing microwave components and test equipment at Wheeler Labs he moved to AIL in the field of electronic reconnaissance. He has been responsible for the development of a number of reconnaissance and jamming systems since that time.

Mr. Lowman has been active in the IEEE for many years. He was a member and chairman of the Joint IRE/AIIEE High-Frequency Measurements Committee, a member of the Facilities Committee, the Standards Committee on Antennas and Waveguides, the Waveguides Standards Committee and is now on the Ethics and Employment Practices Committee.

Mr. Lowman has served the Long Island Section as co-editor of the Pulse, chairman of the Employment Seminars, Metropolitan Group Coordinator, Program Chairman, Second Vice Chairman and currently is the First Vice Chairman. He is also a member of the American Management Association, an officer of the Metropolitan Club, Association of Old Crows, and the local chapter of the National Association for Remotely Piloted Vehicles.

In civic affairs, Mr. Lowman has been active in the American Field Service international scholarship programs, School Curriculum Committee, Boy Scout activities, and has served as Church School Superintendent of the Huntington Congregational Church.



Peter D. Lubell
First Vice Chairman

Peter Lubell is presently Manager of Communications Applications in the Communications Systems Department of AIL utilizing his background of over sixteen years of varied engineering and management experience in the field of information transmission systems.

Before joining AIL, Mr. Lubell was Manager of the Development Laboratory at the Laser Link Corporation, working in the area of multi-channel microwave communications for CATV. Prior to this he was Manager of Special Products at RHG Electronics Laboratory with responsibility for the entire line of broadcast oriented microwave links as well as a variety of broadband data links for both industry and government.

Mr. Lubell is a Senior Member of the IEEE and Past Chairman of both the Long Island Chapter of the Communications Society (COMSOC) and of the Group on Microwave Theory and Techniques (GMTT). He has served on the Long Island Excom for many years in the areas of facilities, Group Coordination, Lecture series, and most recently, Second Vice-Chairman. Presently, he is an Associate Member of the NSPE and a Member of the IEEE groups on Broadcasting, Microwave Theory and Techniques, and the Communications Society.

Mr. Lubell holds a BEE degree from The Cooper Union (1958) and has completed a major portion of the Masters Program in Electrophysics at PINY. He is the author of numerous papers in the microwave communications field including a presentation at the 1972 International Communications Conference (ICC) and an article appearing in the April 1974 issue of Microwave Magazine.



Victor Zourides
Second Vice Chairman

Victor G. Zourides received the BS (Physics) degree from Polytechnic Institute of Brooklyn in 1953, and the MEE degree from New York University in 1962. He is a licensed Professional Engineer registered in New York State.

At the present time, he is Group Head, Electrical Engineering, Product Support at Grumman Aerospace Corporation responsible for circuit design, power and integration. Prior to this at Grumman, he was Project Leader on F14A Support, responsible for developing Automatic Test Program Sets for many of the F14A's avionics units.

Prior to joining Grumman, Mr. Zourides was employed by Sperry Gyroscope Co., where he started his career in 1953. While at Sperry, he was involved in the design and development of many different programs, principally support or implementation of airborne radars. Most typical was the development of the Automatic Test Equipment for the B58 (Hustler) radars. His experience has included the applications of analog, digital and RF techniques. He has also had considerable experience with pulse compression techniques for which he has received a patent. He left Sperry in 1969, as a Senior Engineer, to join Grumman.

His service to the Long Island Section of the IEEE includes Chairman of the Professional Activities Committee and Chairman of the Communications Committee. He is also a member of the Ethics and Employment Practices Committee of the IEEE. As a member of this committee, he served on the subcommittee that investigated the BART case for recommending IEEE action. He is presently subcommittee Chairman of Licensure and Certification.

Mr. Zourides' recent interests have included Jr. League Soccer Referee and Karate.

MEETING ANNOUNCEMENT

MICROWAVE THEORY AND TECHNIQUES SOCIETY (Long Island-N.Y. Section)

Date: 21 May, 1975
Time: 8:00 P.M.
Place: Polytechnic Institute of N.Y. Route 110, Farmingdale, N.Y.
Topic: Microwave Acoustics—A perspective for the 70's
Speaker: Dr. Henry L. Bertoni, Associate Professor of Electrophysics, Polytechnic Institute of N.Y.
Pre-Meeting Dinner: 6:00 P.M., Blue Dolphin, Route 110, Farmingdale, N.Y.



Edward J. Fuller
Secretary

Edward J. Fuller graduated from Fordham College in 1949 with a BS degree in Physics. Following graduation, he accepted a graduate assistantship from Fordham University and received the MS degree in Physics the following year.

After receiving his Master's degree, he served in the U. S. Army at the Signal Corps Engineering Laboratories at Fort Monmouth, N.J. for two years working in conjunction with Atomic Energy Commission analyzing the effects of gamma radiation resultant from nuclear explosions.

Upon his discharge from the Army, Mr. Fuller joined Sperry Gyroscope Company where he initially worked on the design of microwave and electronic test equipment. During his 16 years at Sperry he was actively engaged in the system parameter determination, circuitry development, fabrication and testing of several receivers including those for the AN/FPS-35 Search Radar, the ARIS Integrated Instrumentation Radar and the CW Doppler modification kit for the TALOS Fire Control Radar. During his last 2 years at Sperry, in the position of Research Section Head, he was responsible for company sponsored research and development work in the areas of linear and digital microcircuits as applicable to radar oriented circuitry and served as an instructor in the Sperry Program for Advanced Careers through Education.

Mr. Fuller joined PRD Electronics in 1968 as a Senior Staff Engineer reporting directly to the Vice President for Advanced Development. He initially worked on the defining of the overall system concept for the CVA VAST system with particular emphasis on the area of digital testing. Presently he is working on automated diagnostic systems related to the testing of diesel engines and other automotive related areas.

Mr. Fuller has authored several papers on radar testing solid state circuitry and digital testing concepts and has had 3 patents granted.

His service to the Long Island Section of the IEEE includes being the current chairman of the Computer Society Chap-



Michael J. Sassano
Treasurer

Michael J. Sassano is employed as a Laboratory Manager for Computing Systems Hardware in the Corporate Owned Analog/Hybrid Computing Facilities of the Grumman Aerospace Corporation. His responsibilities include: computer systems design, systems reliability, modification and updating, and computer systems interface and integration. Mr. Sassano has been with Grumman for the past twelve years. He was on the staff of Adelphi University for the six year period prior to his coming to Grumman. At Adelphi, he held the position of Chief Engineer for the Electronic Computation Laboratories of Adelphi Research Center Inc. and was a staff member of the Physics Department of Adelphi University.

Mr. Sassano holds the Certificate in Advanced Electronics Technology from RCA Institute and the BS in Physics from Adelphi. His graduate studies include work in Electronics, Physics, Mathematics and Computers.

Mr. Sassano has been very active in Long Island Section affairs for the past ten years. Some of the positions he held and responsibilities discharged are as follows: Computer Society Program Committee (1966-67); Computer Society Secretary (1967-68); Computer Society Vice Chairman (1968-69); Computer Society Chairman (1969-71); Lecture Series Chairman (1969-72); Section Program Committee Member (1969-71); Symposia Committee (1970-71); Secretary Long Island Section (1972-73); Awards Presentation Chairman (1973-74); IEEE Ethics & Emp. Pract. Comm. (1974-75); and Group Coordinator (1974-75).

(Continued)

ter, participation in Student activities, and past participation as a member of the Publicity Committee.

In civic affairs Mr. Fuller has been especially active in the areas of Conservation and outdoor related activities through participation with the Appalachian Mountain Club, National Audubon Society, Wilderness Society, and the Sierra Club. He is presently a hike leader for the N.Y. Chapter of the Appalachian Mountain Club.

MEMBERSHIP NEWS

by Mannie Schweisberg

In one of our recent columns, we described the work of IEEE member Mr. Richard LaRosa and his solar heated house. He also sent an interesting letter which we could not publish because of space limitations. The following is an excerpt from his letter of 17 January 1975

— So why should an IEEE member be interested in solar energy, heat pumps, water pumps, thermodynamics, insulation, and such? Most of us can accept the possibility that overspecializing in some particular narrow part of electrical engineering can get us into a rut. But how about just confining ourselves to electrical engineering? After WW II and during the 50's and 60's, there was a great demand for our services as EE's, particularly in electronics and microwaves. Is it possible that confining ourselves to electrical engineering makes us too narrow to solve the problems which are beginning to emerge? Might this have some bearing on the present uncertainty of our employment? I've seen many changes in 27 years of engineering employment. It was never a free ride, but I wouldn't describe it as suffering, either. I think it's going to get pretty bumpy.

I know that the Membership News is not an opinion forum. I am writing to you to ask for some mention in your column in the hope of finding or stimulating some interest in solar energy or related work among the IEEE members. Hopefully yours, Richard LaRosa."

Appropriate letters have been sent to the following members. (Legend: A = Associate, S = Student, M = Member, SM = Senior Member, F = Fellow).

New Members

E. L. Andersen—M
A. N. Arifian—M
L. A. Bozzella—M
M. Camen—M
J. J. Eff—M
K. N. Ehlinger—S
J. B. Everson—M
J. R. Figlia—M
D. D. Flynn—M
L. Freed—M
R. J. Friedman—M
M. A. Gillis—S
M. S. Glass—M
A. S. Goldberg—M
P. V. Graziano—M
D. S. Lang—S
J. Lazzaro—M
R. J. Mammow—S
R. Marsico—M
H. B. Mass—S
G. G. McGuire—A
V. T. Nguyen—S
K. H. Plotkin—S
H. W. Rappuhn—M
S. G. Rogich—M
J. S. Roskowsky—M
M. Sandler—M
S. M. Schlanger—M
I. B. Schwartz—S
M. Schweitzer—M

T. Tawshunsky—M
K. S. Tsang—S
T. H. Zehner—M
G. M. Zinke—S

Upgraded

J. A. Bondell—S
A. D. Bresler—F
J. V. DiFranco—F
H. C. Okean—F
G. W. Stroke—F

Moved Into Section

V. J. Caggiano—A
B. L. D'Cruz—A
S. Fuller—A
R. S. Goldblatt—M
D. M. Goodman—SM
R. W. Heinsohn—A
F. Holzmacher—S
J. Huie—M
G. Khanna—M
Y. C. Kim—M
A. I. Levin—M
J. A. Papazoglou—S
D. S. Rothschild—M
A. J. Russo—S
L. H. Sekowski—A
W. T. Shepherd—M
E. Van Eeden—A
W. Yang—S
W. Yeh—M

Panelists From Professional Societies Debate Engineering Employment Guidelines

The forum on engineering employment guidelines took place at Polytechnic Institute, Long Island on March 25th. Gabe Isakson of AIAA and this writer were the authors of the event, which was sponsored by AIAA, AIChE, ASME, IEEE, Nassau and Suffolk chapters of NYSSPE. Art Rossoff of AIAA and IEEE served as moderator.

Art opened the forum by defining guidelines as a document that describes how a salaried engineer and his employer should behave toward each other. Several societies have their own guidelines, but one version which 17 of them formulated and to which 35 now subscribe, offers some hope of industry adoption. This version is called the Intersociety Guidelines. But up till now, it's the engineers who've done the hoping, while industry has been notably cool to the idea.

A February 1975 intersociety meeting, convened to strengthen the Guidelines, failed to reach any consensus, and the issue was tabled, to the great dismay of the few engineers who even knew about the meeting. The most notable abstainer from the Intersociety version is American Chemical Society (ACS). Their reluctance to endorse this version stems from the fact that they have their own version, which is much stronger, and is *enforced*. In fact Allen Nixon, former president of ACS, feels that some sort of guidelines should be written into law.

Art Rossoff directed three questions at all the panelists:

1. What major changes would you make to the Guidelines?
2. What's the purpose of the Guidelines (a) Simply guidance (b) To serve as a yardstick for employer and employee to measure each other's actions (c) To constrain both parties?
3. If choice (c), then how?

Dr. Jim Bennett of ACS was the first panelist to speak. He told how ACS developed the Chemist's Creed in 1965 and soon afterward developed employment guidelines. Recessions in the late '60's and early '70's precipitated more action, which resulted in their first guidelines being published in 1971. ACS Guidelines are not a legal document, nor are they intended to be a handbook of management practice. However, they do represent a viable alternative to unionization, and their principal use lately is in evaluation of termination proceedings. This does not imply that ACS condones layoffs, but they choose to review layoffs brought to their attention, to verify that they embody proper treatment of ACS members. The local ACS section checks the layoff against 7 criteria. Since 1969, ACS has

examined 115 layoffs, and, has published 7 articles about abuses. The Society does a confidential review of employment conditions other than termination and maintains a fund for legal aid of ACS members in professional distress. It has cited 59 cases of other employment abuses. What does the industry think of their Guidelines? Well the ACS has 210 corporate members, who reviewed the Guidelines in 1972. Of those who responded, 77% agreed not only with Guidelines in general, but also with implementation by ACS. However many offered objections also, so ACS composed guidelines for employees, due for review in this year's ACS agenda. As far as endorsing the Intersociety Guidelines in their present form, ACS is further from that than ever, due to the weakness of the document. Since ACS' own Guidelines have enforcement by publication, ACS does not choose to endorse the unenforced Intersociety document.

Al Cleveland, National Director of AIAA and VP of Lockheed, was the second panelist to speak. He described himself as an engineer, not an industrial relations man, and thus unable to speak professionally on guidelines. However, he felt we need good common sense with regard to the Guidelines and a proper systems approach to management of a company. The Guidelines represent poor engineering, because they fail to consider all three players in the engineering game: the societies, the employer, and the government. You see, the major purpose of Guidelines is to reduce fear of unemployment. The rest is gloss. But the government is a major contributor to engineering unemployment, and Guidelines do nothing about the government. Another weakness of the Guidelines is the failure of the societies to involve industry in their creation. Still another weakness is their failure to account for the effect of engineering unions. Lockheed accomplishes the principal purpose of the Guidelines without acceptance of them; Lockheed works harder for its laid off employees than the Guidelines ever would. They seek reemployment for laid off engineers. Also they don't stockpile engineers (a factor which leads to frequent layoffs). Lockheed simply cannot subscribe to Guidelines, because this gives away certain company prerogatives; no company can afford to weaken its competitive position. Besides the Guidelines are not likely to amount to anything.

Howard Engel, National Director of NSPE and a salaried engineer, was the next panelist to speak. Referring to the editorial comment that the Guidelines are rules drawn in invisible ink, Howard Engel said, so what. Western morality is also a set of rules written in invisible ink, but society tries to be moral. How can the engineer rectify the fundamental inequity of his professional situation?

He must deal with the corporate employer individually, but the corporations form trade associations and jointly formulate criteria for dealing with engineers. They play a game which is similar in its unfairness to a medieval ritual. An archer is told he must make his arrow hit a target whose location he doesn't know. When his arrow strikes the ground, the king's servant draws a circle elsewhere and says "You missed." The circle must be drawn before the archer shoots. And the engineer should function to well-defined rules of professional treatment, not just whatever suits the company.

Thirteen years ago, a large corporation conducted an engineering layoff with two hours notice. One of those laid off was an NSPE member, and he complained to NSPE. The president of the New York Society set up a committee to study the problem, and this was the beginning of NSPE's guidelines. Other sections joined the effort to formulate guidelines and gain industry acceptance. Before three years had gone by, the Guidelines had already received national attention. Yet now, ten years later, we're still debating the issue. The problem is simple. National Labor Relations law states that only a duly elected bargaining agent can interpose between a corporation and its employer. The agent is so defined by the law, as to be a union only. That being the case, we should proceed to change the law. Right now our hands are tied. Industry acceptance of Guidelines must now be based only on moral persuasion. But the true hallmark of a professional is its ability to govern itself. We, the engineers are the governed; we are powerless to govern ourselves. We should, therefore, strive to gain implementation of the Guidelines. We now have management's attention; we should take the next step.

Harold Goldberg, president of Data Precision and VP of IEEE spoke next. He stated that the industry needs a set of uniform constraints to guide its utilization of engineers. Some of the societies have had 10 years of work in the Guidelines, but IEEE only considered the problem in 1971 and began to work on it in 1972, after changing the IEEE constitution to permit professional activities. Nevertheless IEEE began efforts to involve industry in the Guidelines in 1972. In 1973, IEEE requested various corporations to endorse Guidelines. They wouldn't sign any agreement, but were willing to be judged by Guidelines. Some large electronics companies find the Guidelines no burden at all, and follow them voluntarily. Some small companies who can't carry a large industrial relations staff use Guidelines as an IR guide. But the problem remains that the working engineer can't count on them, because they're not currently enforceable. One can't call a strike on

(Continued on page 7)



EDUCATIONAL PROGRAM — FALL 1975

REVIEW STUDY GROUPS — FOR PROFESSIONAL ENGINEER EXAMINATIONS

This program is designed to prepare candidates for Professional Engineering License examinations in New York and New Jersey. The material is consistent with the national type of exam used for the New York license examinations. Candidates for Part I and Part II should enroll in Study Group No. 1, No. 2 and No. 3. The New York State Board permits graduates of approved schools to take Parts I and II and qualify for "Engineering in Training." New York exams will be held in November, 1975 and April, 1976. Please note that the fall course will be completed prior to the November exam.

*** Due to the early PE exam dates in Fall, 1975, the Committee will split Review Study Group 5 in two parts with a summer break in between. The schedule is as follows:**

BASIC ENGINEERING SCIENCES I (IEEE—ASME)

STUDY GROUP NO. 1

Review for Part I & Part II, N.Y. Exam. Review will cover practical applications of Statics, Mechanics of Materials. TUESDAYS, Starting August 5, 1975, 6:30—9:00 P.M., 12 sessions—Room 1425, Con Edison Co., 4 Irving Place
Instructor: B. Koplík, Ph.D., P.E., Professor of Mechanical Engineering, Polytechnic Institute of New York

BASIC ENGINEERING SCIENCES II (ASME)

STUDY GROUP NO. 2

Review for Part I & Part II, N.Y. Exam. Review will cover practical applications of Dynamics, Fluid Mechanics, Thermodynamics and Electrical Principles. MONDAYS, Starting July 14, 1975, 6:30—9:00 P.M., 12 sessions—Room 1425, Con Edison Co., 4 Irving Place
Instructor: M. Kurtz, P.E., Consulting Engineer

ENGINEERING ECONOMICS & PRACTICE (IEEE—ASME)

STUDY GROUP NO. 3

Review for Engineering Economics for all three sections of the exam. Review will cover economic comparisons, annual cost, present worth and rate of return. Fixed and operating costs, accounting and cost analysis, depreciation, taxes and valuations will also be reviewed. THURSDAYS, Starting August 7, 1975, 6:30—9:00 P.M., 12 sessions—Room 1405, Con Edison Co., 4 Irving Place
Instructor: R.E. Mendoza, P.E., Public Service Electric & Gas of New Jersey

MECHANICAL ENGINEERING (ASME)

STUDY GROUP NO. 4

Review for Mechanical Engineering Section of Part III, N.Y. Exam. Application of mechanical engineering principles to combustion, gas dynamics, compression shock, nozzle design, steam power plant cycles, psychrometrics, air conditioning heat transfer, nuclear reactors, Mach cone, Kinetics, gyroscope motion, vibratory motion, balancing of machines, compound shafts, design of gears, hydraulics, pumps and fans, stress and deformation of machine elements, etc. WEDNESDAYS, Starting July 23, 1975, 6:30—9:00 P.M., 14 sessions—Room 1425, Con Edison Co., 4 Irving Place
Instructor: M. Kurtz, P.E., Consulting Engineer

*** ELECTRICAL ENGINEERING AND APPLICATIONS (IEEE)**

STUDY GROUP NO. 5

Review for Electrical Engineering Section of Part III, N.Y. Exam. Electrical Engineering Principles and Applications of: transformers a-c and d-c machines, transmission lines, filters, wave guides, networks, impedance matching, bridges, coupled circuits, resonance, harmonics, transients, three-phase power, amplifiers, electronic circuits, Root locus and Routh Criteria.

WEDNESDAYS, Starting May 21, 1975 for 5 or 6 sessions then resuming on September 10, 1975, 6:30—9:00 P.M., 12 sessions total—Room 1405, Con Edison Co., 4 Irving Place

Instructors: L.E. Burnett, P.E., P.A.S.N.Y.

S. Sonsky, P.E., Queensborough Community College

SEE REGISTRATION FORMS ON REVERSE SIDE.

PLEASE POST ON BULLETIN BOARD — ALL GROUPS ARE OPEN TO THE PUBLIC

NY&LI Sections, IEEE



Power and Industrial Div.

**EDUCATIONAL PROGRAM — FALL 1975
SPECIAL STUDY GROUPS**

Metropolitan Section



ASME

The following study groups will be presented in the Fall starting mid-September:

- HIGH VOLTAGE CIRCUIT BREAKER ANALYSIS
- FUNDAMENTALS OF COMPUTER LANGUAGE
- FUNDAMENTALS OF ELECTRICAL DESIGN II
- NUCLEAR POWER PLANT DESIGN
- ENERGY CONSERVATION

**COMPLETE INFORMATION ON SPECIAL STUDY GROUPS
WILL BE PUBLISHED AT A LATER DATE.**

REGISTRATION INFORMATION FOR REVIEW STUDY GROUPS

| GROUPS # | FEE PER GROUP | PAYABLE TO | MAIL TO |
|----------|---|--|---|
| 1,3,5 | \$50 each for Members, IEEE, ASME, NYSSPE; \$60 each for all others | "POWER & IND. GROUP N.Y. SECTION IEEE" | <i>I.M. Berger</i> , Vice Chairman Review Studies Educational Committee, IEEE N.Y.C. Transit Authority, Rm. 1200 370 Jay St., Brooklyn, N.Y. 11201 Phone: (212) 330-4495 |
| 2 | \$50 each for Members, IEEE, ASME, NYSSPE; \$60 each for all others | "ASME METROPOLITAN SECTION" | <i>T.J. Gucciardo</i> , P.E. Vice Chairman Education Comm., ASME, N.Y.C. Health & Hospital Corp. Bureau of Engineering & Maintenance 66 Leonard St., N.Y., N.Y. 10013 |
| 4 | \$50 each for Members, IEEE, ASME, NYSSPE; \$60 each for all others | | |

For further information contact: R. Samuelson, F. Riley or R. Nathan—Phone (212) 566-6940.

Fill out one registration form for each group and mail with payment
Registrations will be accepted at first and second sessions to the limit of room capacity.

| REGISTRATION FORM | REGISTRATION FORM |
|-------------------------------------|-------------------------------------|
| Name (printed) | Name (printed) |
| Firm Position | Firm Position |
| Business Address | Business Address |
| Phone No. | Phone No. |
| Home Address | Home Address |
| | |
| Study Group | Study Group |
| Member of: | Member of: |
| <input type="checkbox"/> IEEE | <input type="checkbox"/> IEEE |
| <input type="checkbox"/> ASME | <input type="checkbox"/> ASME |
| <input type="checkbox"/> OTHER | <input type="checkbox"/> OTHER |
| <input type="checkbox"/> NON-MEMBER | <input type="checkbox"/> NON-MEMBER |
| Membership | Membership |
| No. | No. |

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account of a violation. When ACS proceeds to enforce their Guidelines, they're flaunting the law. They've been getting away with it for several years, but they could be sued anytime. IEEE doesn't wish to tie up its treasury in law suits. So you see, further progress requires drastic changes, and answers are hard to come by.

Following Harold Goldberg's discussion, there was a period of panelist responses. Jim Bennett pointed out that ACS can publish factual and documented information about Guidelines violations anytime. There's no legal liability in that. They question the company and publish its statement, if it permits. Then they question the engineer with the complaint, and publish his statement. Of course they include an ACS opinion in their article, but other societies don't have to do that in order to achieve enforcement. The ACS opinion is rendered by a special committee which judges violations.

Al Cleveland pointed out the companies in a given industry don't necessarily thrive on constraints, even if they are uniform. The buggy-whip industry disappeared through this reasoning. Companies in electronics could yield to the Guidelines, only to find themselves superseded by another industry. At this point Art Rossoff questioned Al Cleveland. He asked what substantive objections Cleveland had, to which the latter responded that unilateral formulation of Guidelines is unsatisfactory. Then Hal Goldberg queried if Al Cleveland would be willing to work on the Guidelines committee. To this, Mr. Cleveland responded negatively again. This would be too close to collective bargaining. Mr. Goldberg then suggested that Mr. Cleveland shouldn't object to the Guidelines, if he refused to contribute to them. Then the audience got into the debate.

Question: How would you implement Guidelines without toughening them?

Answer: Howard Engel—To date, conferences with industry haven't worked, but time is on our side. In good times, some companies will observe Guidelines in their competition to attract engineers. Gradually the tide will turn. Hal Goldberg mentioned that IEEE is trying to overcome large corporations' suspicion of the Guidelines. They're having conferences with executives of large corporations to gain acceptance without coercion. To this, Al Cleveland stated that Lockheed encourages such discussion with the societies, but endorsement is another matter entirely, because this gives away a bit of business flexibility and cuts the competitive edge. Thus endorsement is objectionable.

Question: Would the government be willing to go along with the Guidelines?

Answer: Howard Engel—One government arsenal accepted the guidelines. Al Cleveland: There's too much gov-

ernment interference right now, and this is a burden on corporations. For each government regulation, we have to have a committee of experts to interface with the government. That cuts our profit margin.

Question: Mr. Cleveland, how would you react to an AIAA scorecard (like that of ACS), which consists of publishing compliance or lack of it?

Answer: Al Cleveland—That isn't the way to do it. Jim Bennett: ACS "scores" companies by publishing their claims and the employee's counterclaims. No company agrees to comply with our Guidelines, but many do so in fact. We find explicit changes in company benefits resulting from our Guidelines, which the company outwardly refuses to back.

Now the reader may wonder what does this all add up to? This writer feels that Engineering Employment Guidelines is a topic which won't be shunted to ground, as long as the professional societies continue to press for industry discussion, acceptance, and endorsement. Just how long will the societies continue to exert pressure, keeping in mind the corporate influence on societies? Just as long as the working engineers continue to exert pressure on their societies. This pressure is exerted in the form of letters to society publications—signed letters for publication, with copies to the society executive board. It's exerted by participation in professional activities, and by the simple expedient of attending forums on professionalism. Those who sat in the audience at the Guidelines forum were preventing the Guidelines from being forgotten. Those who stayed home that night were telling the societies not to give a damn.

Robert Bruce, *Chairman*
Professional Activities
Committee, L.I. Section IEEE

IEEE JOINS PFP

Reaffirming its desire to move ahead on the broad question of providing pension "portability," the Board of Directors of the Institute of Electrical and Electronics Engineers (IEEE) has agreed to join with Pensions for Professionals, Inc. (PFP). This step was taken to aid in the future development of specific pension plans aimed at providing additional coverage to as broad a spectrum of professional society members as is possible under current law.

Commenting on IEEE's decision to join PFP, IEEE President Arthur P. Stern said: "The recent passage of the Employee Retirement Income Security Act (ERISA) now makes possible certain pension offerings to a greater number of individuals than has heretofore been possible. These offerings in-

clude: *improved* conventional corporate pension plans, profit-sharing plans, and annuities; *improved* Keogh plans for self-employed individuals or part-time consultants; the *new* sheltered Individual Retirement Account (IRA) for employed individuals not covered by any employer-run pension plan; legal provisions for immediate vesting, employer-funded plans designed *exclusively* for engineers and scientists. IEEE feels these strengthened pension offerings can best be handled through the auspices of PFP."

Dr. E. E. McSweeney, President of the PFP, in describing their present plans, said: "PFP, Inc. is currently offering an early vesting, conventional corporate pension plan aimed at small employers. It has also made arrangements for a Keogh plan and can accept money for purchase of qualified annuities. It is actively developing an IRA to meet provisions of the recently released IRS regulations. IEEE is joining the PFP corporation expressly to aid in the future development of these plans and to assist in marketing these to IEEE members and their employers."

In taking this step, both organizations realize the long term development problem inherent in the *immediate* vesting, "carve out" plan for engineers and scientists only. They have, therefore agreed that the IEEE sponsored corporation, Pensions for Technical Professionals, Inc. (ptp), will continue to develop this plan as well as to examine the need for a more comprehensive master IRA. The ptp Corporation will, together with the Joint Pension Committee, spearhead additional legislative efforts to improve chances of selling immediate vesting plans to engineering employers and to expand the usefulness of IRA pension plans. IEEE's non-qualified annuity plan will also be offered to all PFP societies.

PFP is already sponsored by the following societies: American Chemical Society, American Institute of Aeronautics and Astronautics, American Institute of Chemical Engineers, American Institute of Chemists, American Nuclear Society, American Society of Civil Engineers, American Society of Mechanical Engineers, American Society of Metals, and American Society for Microbiology. Several other societies, supporters of either ptp, Inc. or the Joint Pension Committee (JPC) are expected to follow IEEE soon in joining PFP. Principals for PFP, ptp, and JPC expect some formal merger action in the near future.

The PFP office is at Front and Plum Streets, Media, Pennsylvania 19063. Telephone: (215) 565-4393.





Arthur L. Rossoff, P.E.

Outstanding Services to Professionalism in Engineering

For contributions leading to the betterment of the professional status of engineers in the areas of ethics, employment guidelines and pensions, and the realistic attainments of these goals.

One of Mr. Rossoff's significant technical contributions to the profession was his book, "Transistor Electronics," which he co-authored and which was the principal basis for the award of Fellow grade in the IEEE.

Arthur L. Rossoff joined the IRE and the AIEE as a student in 1942. In 1971, the IEEE awarded him the grade of Fellow.

Since 1966, Mr. Rossoff has given active leadership to the Long Island Section, holding successively the positions of Student Activities Chairman, Program Chairman, Secretary, Vice Chairman and, finally, Section Chairman in 1971. In 1974, he was awarded a citation "for services rendered in furthering the objectives of the IEEE through distinguished leadership in the area of professional activities in Region 1 and nationally."

Since 1972, Mr. Rossoff has worked for the profession at the Institute level, where he is presently a member of the US Activities Board (USAB), having previously been a member of its predecessors, the US Activities Committee and the Professional Activities Committee. He is now chairman of the Ethics and Employment Practices Committee, of which he has been a member since 1972. His other committee assignments have been as chairman of the USAC/PAC Coordinating Committee and as a member of the Government Relations Committee.

Mr. Rossoff's service to the profession has also included active roles in the AIAA and in the local and state Professional Engineering Societies. The LI Section AIAA recently honored him with a citation for his efforts and, in 1972, he was awarded a N.Y. State PE License by "eminence."

Mr. Rossoff is now employed by the Polytechnic Institute of New York as Assistant to the President with duties involving industry, government and community relations. He was previously employed by Grumman Aerospace Corporation in its space programs. Previous to that, he was employed by the General Instrument Corp. on Long Island, having risen from project engineer to V.P., Director of Marketing of its Electronic Systems Division.

In 1972, Mr. Rossoff chaired the L.I. Space Shuttle Task Force, a group of L.I. leaders, congressmen and senators, which worked on behalf of Grumman for the award of the Space Shuttle Contract. In '73 he joined a similar effort on behalf of Republic for the A-10 contract.

SPECIAL AWARDS

At the 1975 Fellow Awards Cocktail Party on April 6, at the Holiday Manor in Bethpage, N.Y., special awards were presented to Arthur V. Loughren and Arthur L. Rossoff. Biographies and photographs of the recipients are presented below:



Arthur V. Loughren

Outstanding Scientist Award

In recognition of his many exceptional technical contributions and in particular his leadership in the development of NTSC Color Television standards.

Arthur V. Loughren was born in Rensselaer, New York. He received the B.A. and E.E. degrees from Columbia University in 1923 and 1925, respectively.

After he was graduated, Mr. Loughren spent two years at the Research Laboratories of General Electric, where he was concerned with problems arising from the adaptation of vacuum tubes to circuits. Subsequently, he was two and a half years in the Radio Engineering Department. In 1930 he transferred to the RCA Manufacturing Company where, successively, he had responsibility for the design of tuned radio frequency receivers, loudspeakers, and phonograph pickups, as well as all factory tests and inspections. In 1934 he rejoined General Electric at Bridgeport, Connecticut, to work on the design of radio receivers.

In 1936, Mr. Loughren joined the laboratories of Hazeltine Corporation. He then rose to become, successively, engineer in charge of television development, design supervisor for military equipment programs, Director of Research, Vice-President in charge of Research for Hazeltine Corporation, and Executive Vice-President of Hazeltine Research, Inc., a subsidiary of Hazeltine Corporation.

Mr. Loughren joined Airborne Instruments Laboratory in 1956 to become Vice-President in charge of Applied Research Division.

In 1962, Mr. Loughren was elected President and Chairman of the Board of Directors of Key Color Studios, Inc., now Key Color Laboratories. In 1964, Mr. Loughren also became a director of and consultant to Lockwood, Kessler & Bartlett, Inc. His client have also included Hazeltine Corporation and Westinghouse Electric Company.

During his career, Mr. Loughren has been awarded 40 electronic patents. He is a member of Phi Beta Kappa, Sigma Xi, and Tau Beta Pi.

His professional and industrial activities have included membership on various Panels of the first and second National Television System Committees, chairman of Panels 7 and 13 of the second NTSC (which formulated the specifications for the present color television signal) and a vice-chairman of the second NTSC itself, membership on Panel 6 of the Radio Technical Planning Board, the Joint Technical Advisory Committee, various Electronic Industries Association committees, and the National Stereophonic Radio Committee. He was President of the Institute of Radio Engineers in 1956, and a member of its Board of Directors from 1952 through 1958. He has served as a member of many IRE committees. He is a Fellow of IEEE, Society of Motion Picture and Television Engineers, and the Radio Club of America. He has served for some years on the Engineering Foundation Board.

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