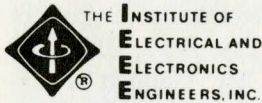


The Life Member Fund Newsletter



Published by the Life Member Fund Committee

November 1981

A letter from the Chairman

Dear Colleague,

First of all, I want to thank the chairmen and volunteers who were responsible for such successful Life Member programs at Electro and Wescon (see page 4). Each one seems more satisfying than the last. I urge you to attend, meet your old friends and catch up on what is making our field so exciting these days.

My travels this year (I like to call it my "energy trip") have been a most rewarding experience. Here is an overview that might whet your appetite for similar ventures: Morgantown Energy Technology Center, DOE. (fluidized-bed combustion, methane from mines, underground coal conversion); Catlettsburg, Ky. Oil from coal; Chattanooga, Tenn. (Raccoon Mt. pumped-storage hydro - all hid in a mountain). Atlanta (Georgia Tech solar tower - field of reflecting dishes; pioneer solar heat and power from parabolic reflectors); Clayton, N. Mex. (DOE/NASA/Westinghouse 200 kw wind turbine generator, W.T.G.); Albuquerque (1. Field of heliostats aimed at tower; 2. Vertical-Axis W.T.G. "egg beater" development; 3. Solar reflecting troughs); Los Alamos (1. Fusion facilities; 2. Meson Facility; 3. Geothermal well into hot dry rock - the old Jemez volcano; 4. Solar mobile homes); Rifle, Cal. (Oil shale - boom country - Paraho above ground resort - Occidental/Tenneco in situ retort - every oil company is involved - no real production yet - Paraho with most 100,000 bbls, is 1/2 day's supply for a refinery); Chicago (Argonne, 1. Nuclear research, breeders, sodium handling; 2. Battery tests; 3. Solar Pond; 4. Wind Power Studies); W. Lafayette, Ind. - alcohol from nonedibles - heat from corn cobs.

It is all new since I retired...paid by tax dollars, yours and mine. I recommend that you go see it!

Next LMF Newsletter in March, 1982.

Sincerely yours,

Dr. Edwin L. Harder, Chairman
1981 Life Member Fund Committee

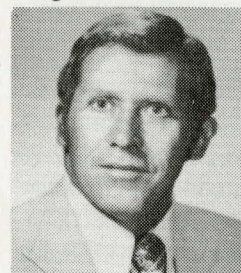
Dr. Robert E. Larson is Newly Elected President, IEEE; James B. Owens is President-Elect; Dr. Thelma A. Estrin is the Executive Vice President

The annual IEEE election had some 31,000 members who cast ballots. Dr. Robert E. Larson was elected President for 1982. James B. Owens becomes the President-Elect - the first IEEE member to hold this office. Dr. Thelma A. Estrin is the new Executive Vice President. (Incidentally, Dr. Estrin is the first woman Executive Vice President of IEEE.)

Dr. Larson is President Systems Control, Inc., Palo Alto, California.

James Owens is president (retired) of Gould-Brown Boveri, Rolling Meadows, Illinois.

Dr. Estrin is Director of Data Processing Laboratory, Brain Research Institute, University of California, Los Angeles.



Dr. Larson has been a member of the Institute since 1958 when he joined as a student - and this should be an inspiration to all student members! In 1973 he became an IEEE Fellow. He served on the Board of Directors, 1978-81, was vice president of Technical Activities, 1980-81, and was Division I Director, 1978-79. He has served on many committees and boards of IEEE and was president of the Control System Society, 1975-76.



Mr. Owens became a Fellow of IEEE in 1969, having joined in 1945. He is a member of the IEEE Board of Directors and Division VII Director. In 1973, he was president of the Power Engineering Society and over the years has served on several committees and boards of IEEE.



Dr. Estrin became a Fellow of the IEEE in 1977, having joined as a student member in 1948. She was a member of the IEEE Board of Directors, 1979-80 and Division VI Director the same year. She was president of the Engineering in Medicine and Biology Society in 1977 and has been very active on a variety of IEEE committees.

Fellowship in Electrical History Awarded to Johns Hopkins Student

Robert A. Rosenberg, a student in the History of Science Department, Johns Hopkins University, has been awarded the fourth Fellowship in Electrical History for the 1981-82 academic year, by the Institute of Electrical and Electronics Engineers (IEEE). The Fellowship, which carries a basic stipend of \$6500 plus an amount up to \$2000 for tuition and fees, is made possible by a grant from the IEEE Life Member Fund and is granted for full-time pre-doctoral study in the history of electrical science and technology.

Robert has received an A.B. from Harvard University, and has been a student at Johns Hopkins since 1978.

As an IEEE History Fellow, he will research "the early development of electrical engineering as a discipline in America." He intends to focus on the creation and growth of formal electrical engineering programs at major learning institutions during the late nineteenth century.

He will examine the influence of industrial needs on engineering curriculum at MIT, Stevens Institute, Cornell, Missouri and other universities. In addition, he will explore scientific/engineering relationships during that same time period.

Robert plans to incorporate a considerable amount of archival research in his work. His study of university, government, and corporate records will be a major part of his doctoral dissertation. He lives in Baltimore.

About the Fellowship in Electrical History for 1982-83

The History Committee of the IEEE announced that it is accepting applications for its 1982-83 Fellowship in the field of electrical engineering history. This Fellowship, funded by a grant from the IEEE Life Member Fund, will consist of a stipend of \$8,500 plus an amount of up to \$2,000 for tuition and fees. Because of inflation, the LMF decided to increase funds available for this Fellowship.

The award is open to all students enrolled in an appropriate graduate program at a school of recognized standing. Students with training in engineering, as well as those having degrees in the sciences or humanities, are encouraged to apply. Fellowships may be used to support full-time dissertation research and preparation as well as worthwhile pre-dissertation projects in the history of electrical science and technology.

The recipient is selected by members of the IEEE History Committee on the basis of academic record, letters of recommendation and quality of research proposal.

The Fellowship is administered by the Center for the History of Electrical Engineering. Information and application forms may be obtained by writing to the Center at 345 East 47th Street, New York, N.Y. 10017. The deadline for the receipt of completed applications and supporting material is February 1, 1982.

E.K. Gannett Named Deputy General Manager of IEEE

The appointment of Elwood K. Gannett to the newly created post of Deputy General Manager of the Institute of Electrical and Electronics Engineers (IEEE) has been announced by Eric Herz, Executive Director and General Manager. Mr. Gannett is currently IEEE Staff Director for Publishing Services. The appointment takes effect December 1, 1981.

Woody joined the headquarters staff of the Institute of Radio Engineers, a predecessor society of the IEEE, in 1946 as Assistant to the Executive Secretary, dealing with IRE section and student activities. In 1949, he was placed in charge of the publications department, a position he has held ever since, first as Technical Editor of the PROCEEDINGS OF THE IRE and later as Managing Editor. As IEEE Staff Director of Publishing Services he has been responsible for the production of 40 journals, the IEEE PRESS book program, and the indexing of all technical literature.

Woody received the B.S.E.E. degree from the University of Michigan. He is a Fellow of the IEEE and the American Association for the Advancement of Science, an Associate Fellow of the American Society for Information Science and the Society for Scholarly Publishing.

He currently is President of the National Federation of Abstracting and Indexing Services, and on the Boards of the Copyright Clearance Center, Engineering Index and the Engineering Societies Library. Woody was on the founding Board of the Society for Scholarly Publishing and is presently chairman of its Long-Range Planning Committee.

Life Members wish him well!

An IEEE First...

IEEE SHORT COURSE PRESENTED VIA SATELLITE TRANSMISSION

January 12, 1982, will be a very special day for the IEEE Continuing Education Department. A short course will be given in 55 locations in a total of 32 states. "Introduction to Project Management" is the course and Merrill W. Buckley, Jr. (M.S.E.E.), administrator of planning and measurement at RCA, Morristown, N.J. is the instructor. Mr. Buckley will conduct the course before a "live" audience in Columbia, S.C., and will be prepared to answer questions from other locations via a toll-free 800 number.

Satcom and Westar are the satellites to be utilized to transmit one of the most important and popular short courses to the widest possible audience at the lowest possible attendance fee.

IEEE members' registration fee is \$125.00 and non-members pay \$150.00.

Should you know of someone who might be interested in this innovative session, full details are available through IEEE, Continuing Education Department, 445 Hoes Lane, Piscataway, N.J. 08854.

College Professor Seeks Help On Research Involving Postwar Germany

Professor John Gamble is now working on a book dealing with science, technology, and reparations in postwar Germany. He has asked us for help. He wants to contact active or retired members of IEEE who went to Germany after World War II to research German scientific and technical "know-how" for the military services, Foreign Economic Administration, or the Department of Commerce. He has already uncovered much of the technical information. Now he needs the "non-technical" information - such items as photographs, personal reports, memoranda, and letters that were excluded from the technical matters.

"I would like information," he asks, "on personal interactions and such long-term associations as may have developed; on the cooperation (or lack of it) by Germans; on the daily operations of a typical team; on German scientists and technicians from the areas of Germany (Saxony, Thuringia, Jena, Halle, Leipzig, etc.) turned over to the Soviet Union as a zone of occupation in July, 1945; and on the evacuation of German scientists and technicians to the U.S., in 1945 and thereafter."

Professor Gamble is an experienced historian, having published many Journal articles and three scholarly books.

You can reach him at The Department of History, Humboldt State University, Arcata, CA 95521. Telephone: (707) 826-3242.

A Report from the IEEE Center for the History of Electrical Engineering

The History Center has created a booklet on the efforts of Michael Faraday and James Clerk Maxwell. Entitled "Lines and Waves," the publication, written by Robert D. Friedel, who is Director of the Center, was prepared in conjunction with a traveling exhibit created by the Center in commemoration of the 150th anniversary of their birth.

Beautifully illustrated, the 32-page booklet tells of the discovery of electromagnetic induction. It gives an insight into both Faraday's and Maxwell's background, education and their scientific discoveries.

Copies are limited: The first 200 Life Members who send \$2.00 (check or money order payable to IEEE) to the IEEE Service Center, 445 Hoes Lane, Piscataway, N.J. 08854. Ask for "Lines and Waves."

The Faraday/Maxwell exhibit is scheduled to appear in the following cities:

Dec. 12 - 24 Science Museum of Virginia...Richmond
Feb. 13 - 28 Calgary Centennial Planaterium...Canada
April 17 - May 30 Alberta Natural Resources
Science Center...Edmonton

Future sights: Reading, PA; Baltimore, MD; Tampa, Fla.

IEEE Centennial Plans Are Varied and Many. Here are Some Possibilities...

The Centennial Task Force has been thinking and planning for 1984 and has already started some projects.

Dr. Michal McMahon is in the midst of writing a history of the Institute and the profession. His book will be published by IEEE Press.

A series of educational programs dealing with the development of our various technologies and their impact on society is being explored for public television presentation.

A Centennial medal is in the preliminary stage of design and consideration is now underway as to exactly those who will receive it.

A proposal will be made to have a commemorative stamp (or group of four stamps) printed by the U.S. Postal Service recognizing the IEEE Centennial or a century of electrical progress, or prominent individuals.

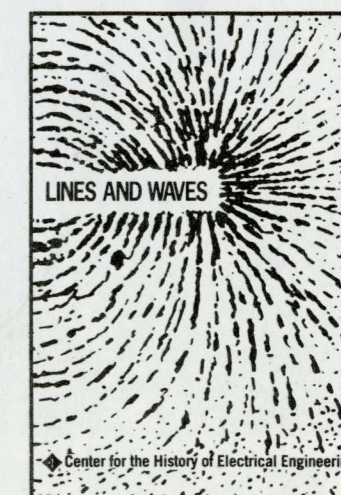
There will be a Centennial Calendar showing the anniversary dates of significant events of technology history and photos tying historical events and inventions to the Program. It will also show 1984 dates of Centennial activities.

We are investigating the possibility of commissioning a Centennial painting, or having a contest among artists. Designs are being readied for Centennial Flags and Banners for display at major 1984 events.

There will be a Centennial traveling exhibit. It is too early to give full details, but an "IEEE Centennial Day" will kick off the year in Boston, tied in with Electro/84. Presentations, a very prominent speaker, awards, formal dinner, give you a hint of the ceremonies.

SPECTRUM magazine plans coverage related to the Centennial in several issues in 1984 and possibly in a late 1983 issue.

There is much more, but they will be reported in more detail in future issues of your Life Member Fund Newsletter.



**Write for
this well-
illustrated
booklet.**

**Life Members at ELECTRO and WESCON '81
Enjoyed Informative and Pleasant Programs**

As one Life Member said, "It was educational... and it was fun!"

He was talking about the Wescon Life Member program, but he might have been talking about both Wescon and the Electro programs.

Electro/81

Here is the report from Julian D. Tebo, Chairman Life Member Program in New York:

Getting together is a big part of the fun. The hospitality suite is available each day for chatting, having a cup of coffee or soft drink and meeting old friends. This year, as at Boston, there was a complimentary luncheon sponsored by the Electro Board of Directors - a muchly appreciated gesture.

Complimentary registration to Electro and show was provided. Badges were available at the Hospitality Suite for the exhibits and Tuesday evening show for those who signed up in advance and latecomers, as well.

The session on Wednesday was attended by 116 persons at the Sheraton Centre Hotel. Thanks to Ernie Witschi, Special Operations Manager of Electro, we had a larger room than originally arranged to accommodate the crowd. (See the two pictures of this August group!)

Dr. William P. Slichter, Executive Director, Research Materials, Science and Engineering Division of Bell Laboratories, Murray Hill, N.J. was the speaker. His topic "Talking with Light." This is a new method of communication over light beams being introduced. There were many questions after his talk, attesting to the enthusiasm for his presentation. He is a fine speaker, one who tailors his subject to his audience.

Special thanks to the Electro Board for the luncheon and hospitality, the Visitors Service Committee, the Facilities/Transportation Committee, the Electro



Some of the Wescon Life Member attendees appear here. Sorry, we didn't get their names to report, but you will recognize old friends.

Staff (especially Mrs. Sue Kingston) for their cooperation in making this program an outstanding success.

Wescon /81

As at Electro, there was a hospitality suite with the usual refreshments each day. There was a 13-member committee headed by Emmet Cameron, Chairman; Meyer Leifer, Vice-Chairman; Palmer Craig (1979 Chairman) and Mike Kahl (1977 Chairman). They had a contribution of \$300 from the Life Member Committee in New York so that the luncheon could be given at a lower price. Result: a delightful Life Member meal for only \$2.50 at the Hilton.

Life Members in the Wescon area were sent two notices offering complimentary registration, describing activities and enclosing a form to return.

A total of 72 Life Members signed the guest book during Wescon. The hospitality room was very active, especially the day of the luncheon. Because of the intense interest shown in the electric auto session at the Anaheim, Wescon in 1980, it was decided to repeat this presentation in San Francisco. The local Electric Auto Association provided a speaker, William B. Palmer and six others from the association for our program.

"If we consider range realistically," Mr. Palmer said, "the electric car is a reality right now. We just have to change our attitude toward transportation and realize that the majority of daily trips are short. We don't have to wait for better batteries; we have them.

"Considering today's price of gas and oil, the electric car is more economical. In terms of fuel comparison, the cost is about half. Charging is done in off-peak utility hours. The car will last longer because of lower maintenance and the average life of the electric car is three to four years.

"The electric car is worth looking into right now."

The committee also wishes to thank Sue Kingston and Donna Call for all their help in completing arrangements.

116 LIFE MEMBERS ENJOYED ELECTRO/81



There are 58 Life Members in this picture. (Left to right - seated on floor) James Davey, Kenneth Bullington, Russell Newhouse, Shigeo Shing, Paul Herkart, A.C. Keller, J.D. Tebo, G.H. McDaniel, John Nordahl, Herman Franke, Willard Gabel, Berthold Sheffield. (First row seated) Vincent Siclari, Edwin Felch, J. Frederick Murbach, S.H. Hartley, Ragnar Stalemark, Jerome Fox, Ralph Cole, Frank Oliver, Dewey Frezzolini, Max Enderlin, Charles Guckel, Albert Bettex, E.F. Trifari, Karl E. Clough, Ray Shankweiler, John Balet. (Second row) James E. Sheperd,

Lawrence Batchelder, A.B. Giordano, James Morelock, J.D. Kleis, Warren Stoker, P.H. Thayer, David Vitrogan, Albert Beiler, R.A. Braden, Ernst Weber, John McManus, Arnold Covey, J.D. Ryder, Edwin L. Harder. (Third row) Walter LaPierre, C.A. Warren, L. Ozolins, John McPherson, Irving Rowe, W. Scott Hill, Chao Chew Wang, Donald Bond, J.A. Szilard, Imre Kazarian, A. Battera, Julian Loebenstein, Jerry Morgan, Waldeneer Poch, Donald Sinclair.



Here are 55 more who had such a great time in New York at Electro/'81. (Seated on floor) Abraham Abramowitz, Col. J.Z. Millar, R.K. Hellman, H.E. Weppler, D.S. Diamond, Tola Marshall, Charles Miller, Edmund Povey. (First Row) Albert Rodrigues, J.J. Okrent, W.W. Peterson, Hugo Cohn, Edward Sieminski, Edgar Van Winkle, L.F. Cleveland, W. Rae Young, T.P. Paledes, William Adler, Leon Podolsky, R.R. Lobosko, John McKay, Frank Pribo, Paul Rosenberg, Gus Jones. (Second Row) Charles Burrill, Sidney Ingram, Fred Gatzke, Norris Levine, Warren

White, Harold Wheeler, Irving Leeds, D.W. Hunt, Fred Kammer, Kenneth Emerson, W. Daniel Goetz, William Karda, Henry Abbott, Nicholas Turitzin, J.S. Bell, Harold Miller. (Third Row) Phillip Smith, Edward Herold, Robert Graef, Dr. Jan Rajchman, Robert Schneider, Bernard Divins, August Mundell, Lester Smith, H.W. Wesearp, Richard Browne, Morris Kaplowitz, C.W.P. Walter, Mircea E. Petrini, Frank Lyman, J.A. Noertker.

Winners Announced

37 Students Participated in Prizes in 1981 Student Paper Awards

The Life Member Fund Committee provided \$5,250 for the IEEE Student Prize Paper Contest this year.

The prizes: \$300 first prize, \$150 second prize, and \$75 third prize.

Twenty-five colleges were represented by the winners:

Region	Name	Prize	School	Subject
1	Alan P. Cavallerano, James P. Coghlan and Rex H. Molisani	1st	Cooper Union	"Voice Recognition Telephone Dialing System"
1	John Barile, and Richard D. Foley	2nd	Cooper Union	"A Comprehensive Digital Filter Laboratory Station"
1	Gary D. Polhemus	3rd	Trenton State College	"Automated Vector Voltmeter Radio Frequency Impedance Measurements"
2	Paul M. Embree	1st	Lehigh University	"Real Time Speech Processing Using a Microcomputer"
2	Scott D. Thompson and Edward J. Sager	2nd	Pennsylvania State University	"Simple Conversion of an Oscilloscope Tool to Logic Analyzer"
2	Wayne C. Pilkington	3rd	Lafayette College	"Microprocessor Control of Prosthetic Arm"
3	Carol Nunnally and Ray Webb	1st	The University of North Carolina at Charlotte	"SCR-Capacitor DC Motor Speed Controller"
3	Harlan Yates	2nd	University of Alabama in Huntsville	"Design of an Intelligent IC Logic Anodizer"
3	James Vandiver	3rd	Christian Brothers College	"Design and Construction of a Data Conversion System"
4	Larry T. Nitz and Edward R. Schiffers	1st	General Motors Institute	"An Automatic Ranging AC Voltmeter/Ammeter"
4	Robert Nash and Paul Leonard	2nd	University of Windsor	"Transportation in the Future - A Magnetically Levitated Vehicle"
4	James R. Peterson, Jr.	3rd	North Dakota State University	"An Audio Reverbation Amplifier"
5	Sylra Steigerwald	1st	U.S. Air Force Academy	"A Simple Digital Voice Recognition System"
5	Wendy K. Ludlum and Douglas R. Long	2nd	Texas Technological University	"Microcomputer Based Analog Signal Processor"
5	Phillip M. Main	3rd	University of Missouri-Kansas City	"Numerical Differential: A New Approach"
6	James K. Elwell	1st	Utah State University	"A Controller-Recorder for Use in the Space Shuttle"
6	Paul M. Tretheway	2nd	California State University-Northridge	"An Infra-Red Based Beam Scanner Position Sensor"
6	Wade L. Heimbigner	3rd	Devry Institute of Technology, Phoenix	"School Bell Control System"
7	Ronald F. Van der Meulen and Kevin J.M. Campbell	1st	University of Calgary	"Design for a Graphic Equalizer"
7	Rod E. Bagg	2nd	Seneca College	"High Voltage C. Transmission"
7	John E. Ens	3rd	University of British Columbia	"An Improved ERG Stimulator"
8	Shpiro Zeev and Roni Weissman	1st	Technion-Israel Institute of Technology	"Word Recognition System"
8	F.J. Gielkens	2nd	Eindhoven University of Technology	"The Influence of the Wind Direction on Rain-Induced Crosspolarization"
8	J. Godet	3rd	Catholic University of Louvain	"Optimal Control of the Primary Coolant Temperature in a Nuclear Power Plant"
10	Colin Phillip Grieshaber	1st	James Cook University of North Queensland	"The Distortion Introduced by Frequency Filters in Frequency Modulated Signals"
10	Masaya Watanabe	2nd	University of Tokyo	"Attribute model as a High-Level User Interface of Relational Data Base"
10	Yoshinori Kuno	3rd	University of Tokyo	"Digital Processing of Images Taken by Fish-eye Lens"

A Review...

This Newsletter Being Sent to All IEEE Members 65 Years of Age and Older

Two years ago the Life Member Fund Committee recommended to the Executive Committee that the Life Member Newsletter be distributed to members 65 and over.

The additional funds needed for extra copies and mailing is money well spent, according to the LMF Committee:

"This post-65 group of non-Life Members is made up of peers and contemporaries of Life Members. It is unwise to leave them out of communication for several years until they become Life Members. The Newsletter will strengthen their connection with the Institute and with the Life Members and help sustain their interest - a definite asset to the Institute."

Here are the qualifications to become a Life Member: The individual must be 65 and have accumulated enough years of Membership in IEEE so that those years plus his/her age equals 100.

To avoid any misunderstanding, however, those of you who are not Life Members should not feel that you are receiving similar benefits as Life Members. This Newsletter comes strictly as a matter of information and nothing more is intended or implied.

The LM Committee has included all IEEE members 65 and over who are not Life Members in the 1981 LMF Directory in a special section and will do so in 1982 as well. If you are a Life Member, the LMF Directory lists you as such (White section). If you are not a Life Member, but are 65 or over, you are listed in this section (Yellow pages). You are not listed in both Sections of the LM Directory.

To the New Life Member and 65'ers - Some Facts for You...

The Board of Directors and the Technical Activities Board encourage reduced conference fees for Life Members. The essence of the policy (1978) which can affect your payment for attendance at various conferences reads:

Reduced fees, or waiver of fees, or fee differential for Students, unemployed IEEE members, retired members, and for Life Members, and for special registrants . . . are permitted at the discretion of the Conference Committee.

About Society Membership

An IEEE Life Member with not less than five years of membership in a Society may also be designated a Life Member in that Society. Thus, the LM would receive free of charge all technical periodicals - Transactions, Magazines and Journ-

als - offered by each Society for which the five-year requirement is satisfied.

To avoid mailing of unwanted publications, Society Life Members are asked *every year* to confirm their continued interest in requested publications.

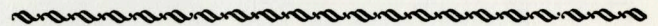
There are two options:

1. Limited Service. You remain a member of the Society, but receive only Newsletters, Conference announcements and other special mailings.
2. Full Service. In addition to the above, you receive Magazines, Transactions and Journals that you list on the form which is sent each year in July.

Unless you *return* the form, the IEEE Service Center will assume you no longer want the Society publications.

As a Life Member, you automatically receive SPECTRUM (unless indicated in writing otherwise). All other publications - Conference Records, Proceedings of the IEEE, IEEE Press Books, IEEE Membership Directory, IEEE Standards Dictionary of Electrical and Electronics Terms, etc., are available at regular member rates.

Our intention here is to clarify any misunderstanding about qualifications for various publications - those you receive free and those for which there is a charge to Life Members.



Greetings
of the Season
and best wishes
for a Happy New Year