

FALL 1978
CONTINUING EDUCATION COURSES

Microprocessors and Microcomputers - limited enrollment

7 - 9 PM for 10 weeks beginning September 11, Cost: IEEE members \$90, non-members \$110

I.T.T. Avionics Auditorium, 500 Washington Ave., Nutley, New Jersey

Note: To accommodate a great demand, this will be a repeat of the very successful course presented this Spring. It will cover hardware, software, and I/O interface controls. Previous knowledge of computerized technology will be helpful but is not necessary.

The time and place of the following courses will be arranged:

Reliability and Its Application - Cost \$70/80

Fundamental methods and approaches for basic reliability and design considerations as well as the applications of various MIL standards.

Fiber Optics Communication - Cost \$90/110

Basic of utilizing fiber optics instead of wire. Input/output circuits, techniques, and transmission characteristics will be presented.

The Design of Modern Power Distribution Systems - Cost \$90/110

Types and applications of various distribution systems 35KV and below new trends and practices in field concepts of voltage transmission, protection from short circuits, ground faults, and over currents.

The Design of Circuits Utilizing C-MOS Technology - Cost \$90/110

A relatively math-free explanation of how to design complementary-metal-oxide silicon (C-MOS) integrated circuits.

National Electric Safety Code and OSHA Regulations - Cost \$90/110

Explanation of new revisions to the code and OSHA Regulations applicable to the safe design plant electrical systems.

In-Lab Medical Emergencies - Cost \$45/55

Learn how to render first-aid until medical help arrives for accidents and sudden illness.

Preparing the Technical Presentation - Cost \$65/75

The use of visual techniques as an adjunct to a technical lecture: the use of slides, audio-visual, multi-media and multiscreen techniques will be reviewed.

Is Your Own Business in Your Future - Cost \$65/75

How to organize, resources available to obtain customers, business practices, managing, and how to grow.

Please tear off and mail this form if you would like to receive without obligation an outline of any course listed above. Courses will be scheduled when enrollment is completed. This form can also be used to register in the microprocessors and minicomputers course.

☐ Please enroll me in the microprocessor and minicomputer course. My check (payable to North Jersey IEEE) is enclosed. Members \$90, non-members \$110.

☐ Please send me without obligation an outline of the following courses

NAME: _____

ADDRESS: _____

DAY/EVENING PHONE: _____

Mail to: Leonard Gardner, 7 Acorn Place, North Caldwell, N. J. 07006.



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

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NEWSLETTER STAFF

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REPORT ALL ADDRESS CHANGES TO:
IEEE Service Center
445 Hoes Lane
Piscataway, N.J. 08854
(201) 981-0060

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.

SECTION OFFICERS

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539-6111 X-488
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687-9226
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696-4695
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785-1297
Member-At-Large Ann Giedlinski
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Officers For 1978 - 79

New North Jersey Section Officers for 1978 - 79 are:

Chairman: Donald Bathke
Vice Chairman -1: Ken Oexle
Vice Chairman -2: Alan Stolpen
Treasurer: Alex Brown
Secretary: Frank Relotto
Members-At-Large: Ann Giedlinski
Eugene Niemiec
Maitland Mc Larin

Ballots were counted at the June 7, 1978 meeting of the Section Executive Committee. Total number of ballots cast by Section members was 86.

Power Group Announces
1978-79 Program Plans

The executive committee for the N. J. Power Engineering Society has blocked out meetings for the coming year using its best judgement. Only the first few meetings have been "cast in concrete" so there is yet an opportunity to incorporate ideas and suggestions you, the members of the PES, have to offer. This is your society and you should get what you desire for your dues.

Please look over the following program and mark the dates on your calendar which will not be changed unless absolutely necessary. Please contact the committee if we missed a topic you would have wanted to hear or would like to have included next year. We also

would appreciate knowing if you wish to be a speaker or know of someone you would like to hear.

Sept. 27 Tour of AT&T Long Lines Facilities
Oct. 31 Joint IEEE - ASME Meeting
How to Start Your Own Business
Nov. 29 Power From Trash (In Planning)
Jan. 24 Energy Theft (In Planning)
Feb. Annual Student Night (In Planning)
Mar. 28 Annual PES Dinner (In Planning)
Apr. 25 Solar Power (In Planning)
May Manufacture of Power Cable and Tour of Manufacturing Facilities (In Planning)

Call or write one of the following:
Seymour Salowe, Chairman, 465-2938,
Westinghouse Electric Corp., 95 Orange
Street, Newark, N. J. 07101

Gerard V. Barton, Vice-Chairman,
353-7000 Ext. 545.

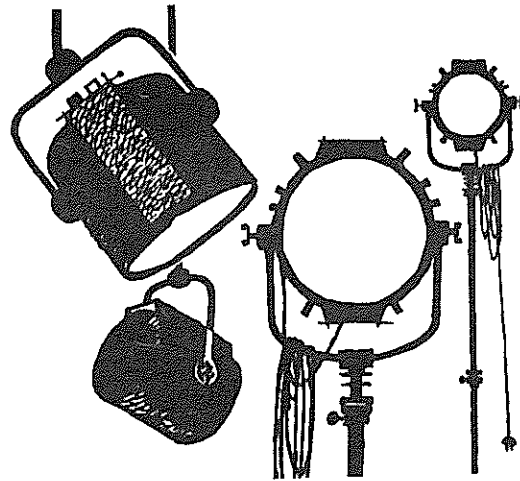
John A. Barka, Secretary, 455-8534.
Gene F. Opdyke, Pgm. Chairman,
688-1300.

AES Pioneer Award

One of the traditions of the Aerospace and Electronic Systems Society and its predecessor groups of the IEEE is the annual "Pioneer Award," established in 1949. The list of winners of this award constitutes a roster of distinguished persons who have contributed notable achievements to the technical fields of AEES. Honoring such persons and recalling their achievements is considered

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SPOTLIGHT ON NORTH JERSEY

to be an important function of a professional organization such as AESS.

The formal announcement of the award traditionally takes place at the banquet of NAECON in Dayton, Ohio, early in May. A handsome cast bronze plaque is presented at that occasion. Naming of the award winner is the function of the Pioneer Awards Committee of AESS, currently chaired by Dr. Max T. Weiss.

Nomination of names for consideration by the Pioneer Awards Committee from the membership-at-large is welcomed and solicited. Such nominations may be sent to the chairman of the committee, M. T. Weiss, The Aerospace Corporation, P. O. Box 92957, Los Angeles, California 90009, telephone (213) 648-5344. Contributions by more than a single individual can be recognized by a joint award. Nominations, once received, are carried over to succeeding years for continued consideration. Nominations should be submitted on a Pioneer Award Nomination Form available by writing or calling Dr. Weiss.

The guidelines followed by the Pioneer Awards Committee are that the award winner must have "contributed significantly to bringing into being systems that are in existence." These systems should be within the specific areas of interest of AESS, that is, aerospace or electronic systems. The contributions for which the award is given should have occurred at least 20 years prior to the year of the award; this guideline is to ensure proper historical perspective for evaluation of the contribution. It is not a condition that the award winner should have been sole or original inventor or developer of any system. "Significant contribution," of a specific nature, is the key criterion. Nationality, residence, membership in AESS, IEEE, or any other organization are not factors. All nominations must be submitted by December 1, 1978 for consideration for the 1979 award.

Happy New Year! No, our calculator calendar is not broken. In the North Jersey Section our year starts on July 1. Then we suffer from the summer doldrums for a couple months so we don't really get things cranked up until after Labor Day. Actually there is a lot of behind the scenes activity going on in the summer but the results don't become visible until September.

Your Executive Committee is planning activities for the 1978-79 season. It is too early to give you detailed information but you might be interested in some of our general plans and objectives.

We start with the premise that the section exists to serve its individual members. Let's consider some of the major services that the section provides to you.

Communications

There are a lot of activities, meetings, tours, etc. taking place in North Jersey that are of interest to engineers. The question is how do we get the word out to our 4500 members. The principal method is through this Newsletter which is published monthly except for June. (In June the editors are busy grading final exams for the Columbia School of Journalism.) Joe Fink's Membership Committee also helps us communicate by posting notices on company bulletin boards. If you don't see these at your company let us know.

Education

One of our major responsibilities is to provide educational opportunities for our members. Len Gardner heads the Education Committee and in a separate article in this Newsletter he talks about courses we are thinking about offering this year. Give him your ideas and support.

Programs

Ralph Hernandez will chair the Program Committee this year and we look forward to some exciting current interest programs. You may see offerings on practical solar power, home computers and energy in New Jersey as well as our always popular tours. (Ralph agreed to take over this committee just so he could be first in line to sign up for the tours.) If we get ambitious we might even try to schedule a social activity or two.

Awards

One of our most prestigious events is our annual awards dinner. We will have one again in March, 1979 to honor some of our more distinguished members and to inspire the rest of us. Plan ahead. Keep your social calendar clear for March until we determine the time and place.

It's going to be an active and exciting year. Keep reading the Newsletter to find out how you can participate.

Don Bathke



1977 U. S. Member Opinion Survey

FINAL RESULTS: A ROADMAP FOR ACTION

The above titled three-and-a-half page article by Survey Task Force Chairman Herbert H. Heller in the May '78 issue of THE INSTITUTE lists results of the survey by general IEEE membership 'population', by specialists in Power Engineering and Computers, and breaks some 13 questions down by variables such as occupational category, age, primary technical specialty, and others. Tucked away and buried in solid text on the bottom of page 6 are the conclusions reached on the basis of the complete and comprehensive report submitted by Dr. Robert Hitlin to USAB. We thought we would reprint that part in case you missed it:

Conclusions: Looking at all cross-tabulations, it appears that geography, primary technical specialty, licensing status, age, years in engineering, number of employers worked for, occupational categories, degrees, and income generally made little difference in the results of the opinion survey, though there were observable degrees of shading. In other words, where a majority opinion was evident, the subgroups also indicated a majority. Where responses were near a tie, subgroups often see-sawed, but were also tied.

So, despite the shouting, the core U.S. membership of IEEE appears homogeneous, and solidly behind the socio-economic and government activities of the U.S. Activities Board. This should not be surprising, since almost every Regionally identified member also has a tech-

PAC NEWS

nical specialty and about half belong to a Society. In other words: We are one and the same and not two fractions of the Institute. The oft-mentioned divided attitude about U.S. activities appears now to be largely fictitious and synthetic. Unfortunately, responding to such charges unnecessarily saps our resources and inhibits progress.

If there was any surprise in the cross-tabulation of this Opinion Survey, it was the fact that the longer a member holds office, the greater the difference between his and his constituency's attitude on most important questions. The greatest divergence, as it turned out, is not between members practicing in different disciplines and not even between "working" engineers and engineering management — it is between the leaders and the led.

Lest we draw hasty conclusions, such divergence has surfaced in other voluntary organizations and not all of it has negative connotations: A leader, who is exposed to and willing to study a wealth of information, may well have a more practical perspective than the average member who seeks a remedy to perceived inequity. What is required, then, is extensive two-way education to bring the differing attitudes into convergence. Until this occurs, however, leaders may want to exercise caution when claiming to speak for their constituents.

A complete report of the results of the survey upon which this article was based is available at \$5 to members (\$10 to non-members) from IEEE Service Center, 445 Hoes Lane, Piscataway, N. J. 08854. Ask for publication No. UHO 133-9.

(Reprinted From "IMPACT", May - June 1978)

Legislation Of Concern

S.1264:

H.R. 10146:

Federal Acquisition Act of 1977

Federal Acquisition Reform Act of 1977

The Issue:

The provisions of this legislation would provide for more technological competition between government contractors. Further, because of its significant simplification of the Federal contracting system, a greater number of companies will be willing and able to compete for government work. These provisions should increase the reliance of government contractors on their engineering workforce, while increasing the number of companies performing such work.

IEEE Position:

The IEEE Board of Directors has approved a position which supports the legislation on a general basis. Letters have been forwarded to Congress stating the IEEE position on the legislation, and urging for its passage.

Current Status:

S. 1264: The committee report has been issued and it is hoped that the measure will reach the floor of the Senate within the near future. S. 1264 passage is anticipated.

H.R. 10146: Currently before the Subcommittee on Legislation and National Security of the House Government Operations Committee. No hearings are as yet scheduled.

Action Requested:

Contact your Senators and urge their support of this legislation.