

IMPACT

THE NEWSLETTER OF IEEE PROFESSIONAL ACTIVITIES

FRANK E. LORD, EDITOR

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NATIONAL PAC WORKSHOP PLANNED FOR SEPTEMBER

The second National PAC Workshop of 1978 is scheduled for September 10 and 11 in Los Angeles. The theme is "The EE Career Potential." Working groups will cover the issues of job discrimination, benefits under ASPR's, Employment Guidelines, establishing legislative and government advisories, technical issues, manpower, ethics and communications.

You may have read other dates and other working group themes announced in other publications, but the above is the final word on this Workshop. The dates are Sunday, the 10th, and Monday, the 11th, of September. The working group on communications has just been added.

The Regional and Division Directors have been asked to sponsor PAC representatives to participate in the Workshop. The Directors were requested to fund members having both the time and interest in advancing PAC goals and in educating other PAC volunteers in their Regions and Divisions. Contact your Director.

Howard B. Hamilton, Director, Region 2 and Donald S. Brereton, Director, Division II, are members of USAB responsible for PAC coordination in the regions and divisions, respectively. Both have agreed to address the PAC coordinators of Regions 1 through 6 and Divisions I through VII in a joint meeting to be held prior to the formal opening of the Workshop. It was felt that separate briefings, which have taken place in the past, were detrimental to the spirit of unity proclaimed by Don and Howard.

IEEE President Ivan A. Gettings will be a featured speaker on Sunday evening. Welcoming remarks and introductions will be made by Hans C. Cherney, the USAB PAC Coordinator. Bruno O. Weinschel, Vice President, Professional Activities, will address Workshop delegates and answer questions.

Starting Monday morning, California Section PAC Chairmen will join together in a panel presentation. Another panel of USAB Task Force Leaders will provide reports on several projects, including pensions, age discrimination, Employment Guidelines, State Intersociety Legislative activities, manpower, and professionalism.

The Workshop will conclude with reports from the working groups and perhaps some indication of "Where Do We Go From Here?" Feedback from PAC representatives and the working groups will be important in developing programs for the years ahead.

WHAT ARE WE PAYING YOU FOR?

By Herb H' Heller

USAB/Internal Communications

In June, Schenectady Section newsletter editor Ira Berman published an item from IMPACT (and the Cleveland IEEE Section News) about our image as engineers. To refresh your memory, the L.A. Times had chided President Carter for his pedantic, impractical and short-sighted "Engineer's Mentality." Division VI candidate Dr. Thelma Estrin had written a letter-to-the-editor which the Times published, in which she set the author straight on "occupational — like ethnic or sexual — stereotyping being demeaning." In the reprinted item, USAB had recommended involvement by you — the reader — in shaping society's opinion of who we are, instead of letting journalists perpetuate their vacuous prejudices. So far so good.

But Ira couldn't leave well enough alone. He chided us and "the lady" for an effort that was read and remembered by "perhaps only 2%." Very little had been accomplished, since "once something is in print, it's damn hard to counter-act." He also conveniently forgot to separate his editorial comment from the main body of the reprinted story and to sign it, so that it looked as if USAB had authored what was strictly his own opinion.

Then came the payoff: "Perhaps a function of the USAB should be publicity ... letting the public draw its own collective opinion about how great all members ... are." "Come on, USAB," he wrote, "stick up for us. What are we paying you for?"

USAB is not a bunch of PR people paid to enhance Mr. Berman's public image, as I am sure he well knows. And just like the editing of Schenectady's newsletter, USAB's work is done by member volunteers, who spend evenings and weekends trying to carry out the majority's mandate against unbelievable odds. However, I must admit that I sometimes wonder if anyone out there is listening.

The cardinal question in the recent U.S. Member Opinion Survey was what to do about USAB's socio-economic and government interface activities. 72% of you wanted to expand them or at least continue their current level. But in a nine-part question of "Why do you belong to IEEE?" to participate in such activities tied for last place at 26%!! Unless I completely misread this, 98% of the 128,000 U.S. members want the 16 USAB members, staff and task forces to do all the work for them, while they send in 1000 pennies a year.

Well, I have news for you. The only source the American public or Congress will respond to are the individual voices and letters of yours, the 128,000 practitioners. What you get for your 3 cents a day is our exhortation and advice in telling you where your letters will be most effective on a particular subject and at what specific point in time. In a crude approximation, we are the facilities and the expertise of a bloodbank. The blood, however, must still be your very own.

EFFECT OF MANAGEMENT ON ENGINEERING CAREERS

Albert Hemel

While reading the paper *Successful Management and Organizational Mugging* by J. Peter Graves, which was presented in a Symposium on Careers at a meeting of the Western Division of the Academy of Management, I was struck by the benefit we engineers might derive from the ideas expressed. Even though engineers were not mentioned in particular, it is easy to see the applicability to members of our profession.

This recent research on professional careers has shown that those managerial practices which most effectively increase the managers' salaries are not necessarily the most effective for getting the job done. The results also show that the largest salary increases tend to go to the managers with the poorest record in helping the professional development of their subordinates.

In a graphic presentation Graves shows the relationship of 18 variables to successful management and effective management. "High Success" management was measured by the managers' recent salary increases. "High Effective" management in getting the job done was measured by rating sheets submitted by the managers' subordinates and colleagues. It is important to keep in mind that engineers are generally considered to have the traits that fall in the "effective in getting the job done" categories. It appears that a number of qualities or skills important to "climbing the ladder" are negatively related to effective managerial performance.

The point must not be overlooked that there are definite short-run benefits of Successful Management as opposed to Effective Management. It takes time and hence costs money to involve subordinates in goal setting, information sharing, delegation, and so on. It is easy to say in nearly any situation, "If we don't solve the short-run aspects of this problem, there might not be a long-run to worry about." In situations of rapid change and economic constraint, the pressures to deal with problems for a short-run perspective are enormous.

Indeed, organizations seldom even view the issue of career development to be a concern of management at all. Rather, the Personnel Department, Employee Development Division, or other staff groups are charged with providing career planning and development programs. Some of these are excellent, most are not. But a watchword of advice common to nearly all of them is the admonition to "take charge of your own career!"

A significant degree of responsibility for career growth certainly rests with the individual. But the tremendous impact of managerial decision making and organizational policy is often either ignored or treated as a benign force readily amenable to any individual's career "plan." The effect of line management is so pervasive that it may be considered a well-established and ongoing system for the development of careers. For every time a person is promoted, assigned a new job, given additional responsibilities, etc., a career development decision has been made. And it is likely to be a decision with greater impact than the individual acting alone could effect. In view of this, engineers would be wise to consider whether the conventional advice on how to "keep current" is really worth much.

MORE THOUGHTS ON PROFESSIONALISM AND THE ENGINEER

Adolph Warsher, P.E.
S.M. & BSEE, M.I.T.

The May-June IMPACT carried a provocative piece by Frederick Suffield, Chairman of IEEE San Diego Section and this response is directed to portions of his philosophy.

He says that IEEE is ineffectual in speaking with one voice, in influencing management or politicians. I agree.

He says that there have been voices which say we (IEEE) should emulate the strong central power of the medical profession (AMA), the legal profession (ABA) or even of labor unions. Again I agree.

Later he says (others' opinions) that there are many arguments for reducing the number of engineers by control of entry into school! A more productive approach would be to raise the standards, improve the education, and insert a series of units taught by people from industry. I still agree.

My school, M.I.T., uses industry-wise professionals for two years of on-the-site real world training to inculcate engineering, marketing and management concepts of industry into its embryo electrical engineers. It even trains them in preparing resumes.

But Suffield voiced a thought pregnant with future advantages to our profession I take off from his wish to control the number of engineers entering the profession. My idea is to establish in the IEEE a functional board to evaluate the results of general knowledge tests to determine the would-be entry's long term qualifications to practice engineering. Test his judgment, prowess in putting forth problem solutions in heuristic manner, and exercise his ethics, all with carefully gauged problems and statements for his responses.

I would have the society enter into agreements with the accredited E.E. and equivalent-degree granting institutions to act as the entry examining board, replacing CEEB and college-operated examinations.

This way, we could cull out those who do not demonstrate prowess, initiative and basic knowledge, and improve the "breed" at the outset of their professional educations. These excludées could, of course, enter other pursuits, the law, business management, aviation, etc., etc., etc.

It is clear to me that the influencing of management would come in due time as the unified accomplishments of the IEEE education "sieve" brought the improved breed of engineers to management's attention. The accomplishment in unifying the entry-level capabilities requirements of all electrical engineering schools' entrance stipulations would in turn raise the regard of the other learned professions for the profession of Electrical Engineer.

We can do it, we must do it, if we wish to attain the professionalism for which so many of "you" write wistfully.

USAB SPEAKERS BUREAU GETS UNDER WAY

Need speakers on professional activities for your meetings? Several IEEE members have volunteered to speak on professional issues at Section, Regional and other meetings. The Washington Office will be happy to get you in touch with IEEE members in various locations.

Some of the volunteers are: Richard C. Benoit, Jr., a Member-at-Large of the United States Activities Board who resides in Utica, N.Y.; Dr. N. B. Rabbat (Wappinger Falls, N.Y.); Professor Stella Lawrence (Bronx, N.Y.); Robert H. Parrish (Stow, Ohio); William A. Coelho (Cincinnati, Ohio); and Raul David Rey, P.E. (Tujunga, CA).

Call or write IEEE United States Activities Board, 2029 K St., N.W., Washington, DC 20006; (202) 785-0017.

WANT TO BE PART OF THE ACTION?

Calls for action by IEEE members on legislative issues of concern to the engineering profession can be heard on USAB's Information Line. Want to know what's happening in Washington? Call (202) 785-2180.

EXPLANATION OF THE PROPOSED CONSTITUTIONAL AMENDMENT ON THE 1978 IEEE BALLOT

At present, only two members of the 29 member IEEE Board of Directors stand for direct election by the 150,000 voting members of the Institute. The remaining Board members are:

1. elected by segments of the voters (Regional and Divisional Directors),
2. or are carry-overs from previous administrations (Junior and Senior Past Presidents),
3. or are elected (appointed) by the Annual Assembly.

This Annual Assembly consists of 20 Board members.

There is nothing wrong with specific membership segments, such as Regions or Divisions, electing their Board representatives, nor with two Past Presidents being on the Board. But to have 20 Directors appoint the remaining 9 appears to some members to be an abrogation of the democratic process. Furthermore, these 9 Board-appointed

TABLE I

Board Member Elected (Appointed) by the Annual Assembly	Member of Exec. Comm.	Corporate Officer
VP of EAB	YES	YES
VP of USAB	YES	YES
VP of Pubs	YES	YES
VP of RAB	YES	YES
VP of TAB	YES	YES
Dir. of Stds.	NO	NO
Secy-Treas.	YES	YES
Exec. Director	YES	NO
Region 10 Director	NO	NO

Table II shows that voting members directly elect less than 30% of the Executive Committee and the Corporate Officers.

TABLE II

Body	Total No. of Members	No. Elected	
		by Voting Members	by Annual Assembly
Board of Directors	29	20	9
Executive Committee	11	3	8
Corporate Officers	9	2	7

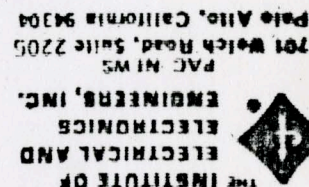
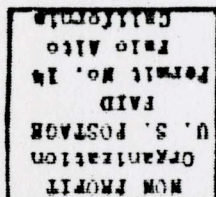
There is a proposed constitutional amendment on the 1978 IEEE ballot which, if carried, would produce the following changes:

1. It would make the entire IEEE Board of Directors voting-member-elected.
2. It would also make the entire Executive Committee and all Corporate Officers voting member-elected.

This proposition would have no effect on the election of any Board member, except those listed in Table I, which would become member-elected positions. The Nominations and Appointments Committee would recommend candidates to appear on the ballot, as they have in the past, only now they'd recommend for 9 additional positions. The voting members could place a petition candidate on the ballot for the same Board positions as before, plus the 9 positions in Table I. Junior and Senior Past Presidents would come into office (as before), without having to appear on the ballot. Regional and Divisional Directors would be elected only by their constituencies, as before.

REPUBLISHING ENCOURAGED

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YOU AND AGE DISCRIMINATION

Creating an environment conducive to a lifetime career in engineering has long been a major concern of the Institute of Electrical and Electronics Engineers. Throughout its history, the primary thrust of the Institute has been to keep its members abreast of the latest technological advancements and to renew the skills that would enable them to maintain a continued and successful career. However, in recent times it has become apparent to the Institute that this kind of effort may not be enough. Age discrimination has had a definite impact on a growing number of members. According to the 1977 IEEE U.S. Member Opinion Survey, almost 20% of the U.S. membership believed that age discrimination prevents them from advancing in their careers. Nearly 60% of the respondents to the same survey favored IEEE efforts supporting government initiatives to promote affirmative action for engineers over 40.

Specifically, the growing misuse or failure to use, older trained technical manpower has been among the factors that led to an erosion of the once preeminent technical position of the United States in the world. Age discrimination is increasingly perceived as detrimental to the individual, to his employer and to the nation.

It was apparently out of such concern that in September 1975, the IEEE Board of Directors was moved to adopt an official position on age discrimination. This position stated in part that:

"The IEEE calls upon industry, government, and education institutions to examine their practices to ensure the profession that such age biases do not exist in their endeavors. The IEEE, in turn, will make every attempt to prevent age bias from existing and encourages the adoption of programs by all employers of electrical and electronics engineers to ensure the efficient, proper, and humane utilization

of engineers. In keeping with that position, a guide has been developed to inform our membership of their rights under the *Age Discrimination in Employment Act of 1967*. It is an important aspect of the IEEE's continuing effort to enable our members to maintain a long and successful career while making a vital contribution to the welfare of the nation. It is our hope that it will also contribute to improving the working environment of engineers and that it will encourage their continuing creativity.

The guide, "You and Age Discrimination" (IEEE Cat. No. UH0131-3) is available from our IEEE Service Center, 445 Hoes Lane, Piscataway, New Jersey 08854.

Hans C. Cherney, Chairman
IEEE Task Force on Age Discrimination

INTERESTING READING

Mandatory Licensing for Engineers: The Tough Questions, Dr. Benjamin Shimberg, Professional Engineer, April 1978.

Engineering and the Female Mind, Samuel C. Florman, Harper's, February 1978.

The Industry Exemptions for Elimination, Lawrence J. Hollander, The Bent of Iau Beta Pi, Spring 1978.

Engineering: A Profession for the Future, Edward Wenk, Jr., The Bent of Iau Beta Pi, Spring 1978.

Are Aliens in Engineering a Threat to Your Job? Irwin Feerst, New Engineer, July Aug. 1977.

Irwin's Last Windmill? Larry Boulden, Editor, Production Engineering, May 1978, p. 47.