

IMPACT

THE NEWSLETTER OF IEEE PROFESSIONAL ACTIVITIES FRANK E. LORD, EDITOR APRIL/MAY 1977

ETHICS — THE CORNERSTONE OF A PROFESSION

By Walter L. Elden, P.E.

I will discuss a conference on ethics, which was held on May 18, 19, 1975 in Baltimore, Md. This was a very important event, as it was the first intersociety gathering of seven engineering and scientific societies in known history to meet and discuss engineering ethics, its problems and solutions.

I took it upon myself in April 1975 to propose a project, get IEEE USAC's approval, and then attend the Engineering Ethics Conference under USAC sponsorship. In my then 17 years industry experience, I had personally seen injustices occurring in various employment situations affecting the public's safety and engineers. I then, as now, was determined to make changes, working within the engineering system of IEEE and NSPE, as I am committed to seeing engineering and IEEE reach the level of a true profession some day soon. This meant that Professionalism and unionism were not compatible in engineering and that the cornerstone of a profession in my mind was ethics.

The Engineering Ethics Conference dealt with the following matters, during two full days of discussion:

1. Case Histories (BART, Goodyear and Stone & Webster)
2. Present Legal and Practical Conditions
3. Engineering Ethics and Education
4. Enforcement of a Code
5. Ideas for a Better Code

The two days discussion and papers were tape recorded by ASCE, later transcribed to text, edited, and a conference proceeding was finally published in March 1977 after some delay. During the two days, I liberally contributed to the discussion and succeeded in placing into the record considerable information relating IEEE's role in the BART case and personal experiences involving knowledge of unethical injustices.

On the last day, I stated five main points, which I had formulated as concluding several themes, which seemed to have run throughout the two day's discussions. As a result, I was asked to draft the five points into a resolution, which I did, and later, the conference attendees approved this IEEE resolution, the only formal action taken by the conference. The five point resolution is given below.

I have recently proposed to IEEE USAB to perform an in-depth analysis of the Engineering Ethics Conference, produce a report, and recommend a plan of action for

IEEE USAB. I would first like to get the opinions of the grass roots members of IEEE's various PACs on the five point Resolution. I suggest each PAC undertake this as a special "ad hoc" sub-committee task to study the Resolution, develop both FOR and AGAINST viewpoints, develop original recommendations, and submit the results to me. I will include the results in my report to IEEE USAB as well as write an article on the findings for publishing in IMPACT in the future. Let's set a cut-off date for submittal to me as being July 15, 1977.

THE RESOLUTION AS AMENDED AND ADOPTED:

"Resolved, that attendees of this conference, co-sponsored by the ASCE, ACS, AICHe, IEEE, NSPE, MS, and the AIMMP, endorse the following five points:

1. That the National Council of Engineering Examiners adopt the new ECPD code of ethics and incorporate it into the NCEE Model Law for adoption by NCEE member jurisdictions.
2. That the industry exemption in existing state registration laws be eliminated.
3. That the ECPD incorporate as a condition for accreditation of engineering schools the teaching and instilling of the purposes, responsibilities, and rights pertinent to the professionalism and ethics of engineers.
4. That engineers should be engaged by a written contract, thus requiring that he or she be licensed.
5. That we feel the need for development of a mechanism whereby a uniform code of ethics becomes a recognized standard of engineering practice — just as any other ANSI standard. It should be required that the standard code be adhered to by any person practicing engineering, whether licensed or not, whether a member of an engineering society or not. And, should the failure to comply result in injury, then such failure would constitute a legal basis for possible negligence or malpractice suits with damages recoverable through normal court proceedings."

I have initiated an undertaking to debate point 4, regarding engaging engineers by written contract, in an SCSPE Ethics Conference, scheduled for April 20, 1977 (Columbia, S.C.). A debate paper, titled "Individualized Engineer Employment Contracts," containing FOR and AGAINST sides, is available from me at no cost, upon request. Write to 312 Bosworth Field Ct., Columbia, S.C. 29210.

I strongly recommend each PAC obtain a copy of the proceedings of the Conference on Engineering Ethics, from ASCE Headquarters, 345 East 47th Street, New York, N.Y. 10017, at \$6.00 cost. This will be a valuable reference book on the subject of ethics.

In closing, let me quote from the March 1977 issue of NSPE's Professional Engineer magazine, wherein Zachary Sherman, P.E., Ph.D. on p. 13, wrote the following:

"The public should be made aware of the fact that a licensed professional engineer's first duty is to the public safety and health, and that this is written into the statutes and laws of each state. Public safety must never be jeopardized, and in the event that an engineer is forced to choose between the design and a borderline compromise for the sake of expediency (typically called a "rush job" in the engineering profession), then he or she must stick to the design even if it means losing the job. The lives of thousands and even tens of thousands of people could depend on the engineer's complete integrity."

The two day Conference on Engineering Ethics dealt with the ways and means of supporting and defending engineers for making ethical choices, in spite of great obstacles. Now, IEEE USAB must implement its own positive program of action in the ethics area.

HOW TO WRITE YOUR CONGRESSMAN

When Writing Your Senator:

Senator (name)

U.S. Senate

Washington, D. C. 20510

Dear Senator (name):

All Senators have the same zip code regardless of the location of their Washington, D.C. office.

When Writing Your Representative:

Congressman (name)

U.S. House of Representatives

Washington, D.C. 20515

Dear Congressman (name):

All Representatives have the same zip code regardless of the location of their Washington, D.C. office.

Remember, there are only 100 Senators and 435 Representatives! All of them have a Washington, D.C. address. If you want to write but forget the zip code or do not remember the correct form of address, write anyway. If you get the name and Washington, D.C. on the envelope, he or she will receive it. If you know the local address, you can write there as well. If you need help identifying your Senator or Representative, call the Washington USAB office at 202/785-0017.

Keep your message short and to the point. Explain what you want the Senator or Representative to do for you. Try to be positive. Above all, don't forget to thank him or her if he or she has done something for you or taken a position you favor.

BEWARE OF GREEKS BEARING GIFTS

Timeo Danaos et dona ferentis. Accipe nunc Danaum
insidias et crimine ab uno.
Vergil, Aeneid. BK.ii

When the ancient and legendary Greeks from Athens could not conquer besieged Troy by frontal attack they "sailed away," leaving behind a large "gift" wooden horse. The naive Trojans took in the "gift" from which after dark crawled Greek soldiers who opened the city gates for the "returning" Greeks. That night Troy burned.

BEWARE OF GREEKS BEARING GIFTS

In 1970 U.S. EEs were a restless bunch due to a bag of ills: high unemployment, lack of professional status, and so on. IEEE members were actually talking about running for high office and getting the Institute to do something about their problems. A nominating petition required signature count equal to 1/3% of the members: about 450. Large, but not impossible. That year the IEEE ballot contained a proposition for Constitution amendment recommended by the Directors. The proposition recognized Division Directors as subject to nomination by the members—AND—specified all nominating petitions require signature count as given in the Bylaws — which are written by the Directors. The members naively voted as recommended by the Directors. When the members saw the new Bylaws they found the 1/3% changed to 2%. The signature count was then 2700. Neat? The trick worked because the members weren't paying attention.

BEWARE OF GREEKS BEARING GIFTS

Since that time five members' propositions for Constitution amendment have been on the ballot. Not one has ever been properly presented to the members and evaluated on its merits in an IEEE open forum. Not one has passed. Last year one proposition advanced a procedure for providing an open forum. The Directors saw to it that IT did not receive an open forum, and opposed it saying they would provide a better plan. The proposition failed to receive the two-thirds majority required for passage. The members weren't paying attention. Over 65% didn't even vote!

One elite group of IEEE members IS paying attention. They are the PAC members and supporters: the readers of this newsletter, for example. You, the collective PAC, must press the Directors into making good on their election campaign promises. A major promise of the Directors was a policy and a procedure for a proper forum on all new ballot propositions. To date nothing has been done. When, and if, a procedure is proposed by the Directors ONLY YOU, the PAC, will be paying attention. Study their proposition carefully. Only you can listen for Greeks breathing inside a "wooden horse."

BEWARE OF GREEKS BEARING GIFTS

John W. Crowe, SM
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SECOND NATIONAL PAC WORKSHOP HELD IN MARCH

The Second National PAC Workshop which was held on 24-26 March in Washington, D.C., was a resounding success. The 1977 USAB Program Plan is moving forward and the follow-on is developing. Besides the general sessions, working group sessions were held far into the night on the following subjects with leadership as shown.

- Affirmative Action for Senior (over 40) Engineers — Hans Cherney
- Engineering Registration — Ross Bell
- Service Contract Act (Wage Busting) — Frank Palmer
- PAC Guide Preparation — Richard Benoit, Jr.
- Pensions — Leo Fanning
- Communications (with the membership) — Robert Cottelessa

As in the First National PAC Workshop last fall, problems were defined, approaches were developed, agreements were reached, and the follow-on is under way. Further reports on the workshop will appear in SPECTRUM. Follow-on workshops will be held in regions, areas, and sections of the Institute under the leadership of those who attended the National workshop.

Preceding the workshop, there were visits to Capitol Hill to talk to our Senators and Congressmen so as to convince them that we engineers are real and vocal. The total campaign to eliminate the abuses of Wage Busting by means of H.R. 314 and other avenues has been acknowledged as having turned Washington upside down. The success of the campaign is a tribute to the leadership of John Guerrero, the drive of Task Force Leader Frank Palmer, the considerable efforts of the Washington staff, and the untiring devotion of many, many volunteers. You, too, can participate by wiring or writing your representative asking for their support. In particular, indicate your support and desire for action to Representative Frank "Thompy" Thompson, Jr. who, with Representative James C. Corman, introduced the bill.

Jack T. Nawrocki
PAC Coordinator, Region 6
Ford Aerospace
3939 Fabian Way
Palo Alto, CA 94303

QUESTION OF QUALITY AND QUANTITY

At the April meeting of USAB a motion was passed relating to the issue of quantity of electrical engineers and the possible rewording of the corresponding portion of the 7 Goals. The issue was provoked by the question of the legality of restricting the supply of anything and the possible associated anti-trust problems. The effect of the motion was to postpone changing the wording to allow time for interested members to submit their thoughts on the subject. Address your inputs to John Guerrero at the Washington, D.C. office.

MID-HUDSON SECTION SURVEY OF MEMBERS IN DUES ARREARS

IEEE Sections have always been encouraged to contact members in dues arrears to try to persuade them to continue their membership. Last fall, the Mid-Hudson Section Membership Committee waged just such a campaign, sending letters and questionnaires to the 112 members who had not paid any dues for 1976.

Seventeen (17) replies were received: five (5) claimed they had already renewed their memberships; four (4) indicated that they planned to renew; and eight (8) said they would not renew for various reasons. A typical response in the last category is quoted here:

"I had been a member of AIEE and then IEEE for 28 years until I dropped my membership early this year. I do not feel IEEE membership has benefited me in any way whatsoever. The management does not support the issues I feel are important; worse, they frequently support the opposite viewpoint!

"Maybe it's the cowardly way out—not to stay and fight for improvement in IEEE—but there are far more important problems to work on and we have only a fixed amount of time."

Our records indicate that the writer became a Member in 1948 and a Senior Member in 1958 — and now, an Ex-member in 1976.

Most of the 112 ex-members to whom questionnaires were sent never did renew; our Section membership declined from 1016 as of 12/31/75 to 926 on 12/31/76. The major reasons, as ascertained from the survey, were the dues increase and the lack of responsiveness to member needs.

It seems clear that Professional Activities will have little value to the members until they are based on inputs from the engineering professionals who want and need them. Perhaps the recent PAC/USAB Workshops and this newsletter are steps in the right direction.

Joseph M. Erbacher
Chairman
Mid-Hudson Section

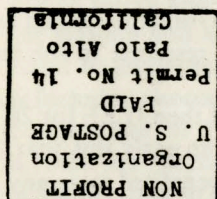
WHO SHOULD RECEIVE IMPACT?

All PAC Chairmen should be receiving this newsletter. Section Chairmen, Institute Officers, Officers of Groups and Societies and Editors of other newsletters also receive it. All other participants and interested members may receive it as well. To add names to the mailing list contact:

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IEEE Washington D.C. Office
2029 K Street, N.W.
Washington, D.C. 20006
Phone (202) 785-0017

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ELECTION ATTITUDE SURVEY

Gerry Parsons of the San Francisco Bay Area Council recently conducted a survey of member attitudes regarding IEEE national elections. The group sampled was not typical of our general membership, but rather was selected from those known to be active in Institute affairs. Consequently a response rate of nearly seventy percent was obtained. The questions and results are as follows:

1. Do you think that the IEEE Board of Directors should propose two candidates from which the membership may select its President rather than only a single candidate?
Yes 90 No 52
2. Do you think that all candidates for IEEE President should be selected by the petition process rather than being nominated by the Board of Directors?
Yes 46 No 96
3. Would you like to see two or more Presidential candidates presented in the national election who are selected to represent different segments of IEEE membership opinion?
Yes 129 No 15
4. Do you believe that when only one Presidential candidate is proposed by the Board of Directors, that it is desirable for another candidate to be qualified by the petition process and run so that the general membership will have a choice?
Yes 137 No 7

ENGINEER DEMAND UP, BUT NOT ENOUGH

The December 1977 demand level for scientists and engineers reached its highest point in the past two years. The Deutsch, Shea & Evans Engineer/Scientist Demand Index was 115.0 for the month, an increase of 6.9 from the November figure and very much higher than 1975's December index of 68.6. DS&E attributes the increase in part to technical factors related to the seasonal adjustment of the index, in part to a steady growth in demand for

technical people which has been maintained throughout the year. The average for 1976 was 101.7, slightly above the average base year of 1961. The 1975 average was 74.4

The supply/demand break even point is 130. At that point all new graduates being currently produced would be able to obtain employment and experienced engineers and scientists would not be involuntarily displaced. If the index were substantially above 130, salaries might rise to the point where formerly displaced engineers would be attracted back into the marketplace.

FUTURE ISSUES

Condensed minutes of USAB Meetings and USAB Steering Committee Meetings will be published in order that PAC members be kept current on USAB matters.

A complete list of points of contact for involvement in all USAB/PAC projects will be published. This information will identify all ongoing national efforts and will list the names, addresses and telephone numbers of all Task Force Leaders, Staff Assistants, and Coordinators. Any member needing this information in the meantime may contact:

Mrs. Dorothy Bomberger
IEEE Program Manager
2029 K. Street N.W.
Washington, D.C. 20006

Material from the PACs is needed as well. Send your articles to the editor:

Frank Lord
35 Hartford Avenue
San Carlos, CA. 94070

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