IEEE

The
Life Member
Fund Newsletter

Fall/Winter 1989-90

Thoughts on time

May I share with you some thoughts on time which have been expressed in literature:

Think for a moment about time. The American Heritage Dictionary says that time is, "A nonspatial continuum in which events occur in apparently irreversible succession." Most intellectual. But, Ben Franklin said, "Time is the stuff which life is made." Very helpful.

Remember Parkinson's Law: "Work expands to fill the time available for its completion." The answer to Parkinson's law seems to be, "Make less time available for a given task and you will complete it that much sooner."

The noted economist and management consultant Peter Drucker coined the phase "management by objective" in 1955. It means thinking in terms of specific goals rather than in terms of procedures and regulations. Management by objective is a style rather than a process to maximize results from time invested.

If you are too busy to exercise, you are too busy. In your hierarchy of values, nothing can have higher priority than health. Being in good physical condition can increase the percentage of "prime time" during which your output is maximized.

Would you like to share your "thoughts on time" with your colleagues? If so, please mail them to my attention at Polytechnic University, 333 Jay Street, Brooklyn, N.Y., 11201. We shall be happy to publicize them in future issues of our newsletter. We thank you with very best wishes.

Anthony B. Giordano, Chairman
Life Member Fund Committee

P.S. Let me correct an oversight. I did not include the IEEE conference, known as MIDCON, in my appreciation comments made in the Spring/Summer 1989 issue. Officers of MIDCON honor the Life members at their yearly conference with a superb program including lunch. We wish to acknowledge their thoughtful efforts with very sincere appreciation.

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Where the money goes

✔ Up to $23,000 will be provided by the Life Member Fund to promote and distribute, "The Miracle Force," to junior and senior high schools. This 28 minute video explores five fields through interviews with engineers, close-ups of the places these engineers work in, and overviews of the resources and techniques they use to produce their "miracles." The fields covered are power, communications, aerospace, computers and bio-medical. Schools are being encouraged to duplicate this video; so the limited copies can have maximum reach. The Life Member Fund's contribution will support services for a 150 videocassette program including promotion, distribution and estimated postage. Encourage your local junior and senior high schools to send their request for the tape on school letterhead to: Video Outreach, P.O. Box 12057, Hauppage, NY 11788. The videocassette must be returned within the week. If it must be received during certain times to be used, the letter should include these constraints.

✔ The 1989-90 IEEE Fellowship in Electrical History was awarded to Graeme Gooday at the University of Kent at Canterbury. Dr. Gooday plans to extend his doctoral research on the development of British experimental physics during the 1860s to 1880s. He will do so by investigating the "development of a laboratory-based culture of electrical engineering between 1870 and 1900." This fellowship is made possible by the Life Member Fund.

✔ Mr. Craig Semsel was the 1989 student summer intern for the IEEE Center for the History of Electrical Engineering. His efforts, which were supported by the Life Member Fund, went to collecting information for a catalog on oral history repositories in the U.S. and Canada relating to electrical science and technology. The History Center expects the guide to be published in 1990.

✔ The 1989 IEEE Life Member prize in Electrical History went to Dr. W. Bernard Carlson of the History Department, University of Virginia, Charlottesville. He received the award for his paper, "Academic Entrepreneurship and Engineering Education: Dugald C. Jackson and the MIT-GE Cooperative Engineering Course, 1907-1932," (Technology and Culture 29, July 1988, pp. 536-570). The award was presented during the annual meeting of the Society for the History of Technology last October.

✔ The LMF also supports the Student Prize Paper Contest, the Education medal, the Donald G. Fink Prize Paper Award, the Life Member Directory (due out in 1990), the Life Members' Stories project and this newsletter.

Wishing you the best of health in the new year.

Health Beat

Bellying up to the waterhole

Water. We sprang from it and to this day we depend on it for our existence. Drinking enough H_20 daily is important in weight control, removing wastes from our bodies, moistening our lungs to facilitate breathing, lubricating our joints and regulating body temperature through perspiration. The International Sportsmedicine Institute recommends a daily intake of 1/2 ounce for every pound of bodyweight for inactive folks. And, if you are physically active, (you jog a lot, for instance) 2/3 ounce of water for every pound. You should drink water throughout the day, with four glasses in any given hour the limit. Of course, check with your doctor before routinely imbibing greater quantities.

A little goes a long way

Exercise is good for you. No surprise news there. But in the most extensive study on health and longevity to date, done by the Institute for Aerobics Research in Dallas, the surprise is how a little goes a long, long way. The Wellness Letter (published by the University of California, Berkeley) reports that the second least fit group of five groups has the greatest drop in mortality (60% for men, 48% for women). Even the 40 mile a week joggers derived relatively small additional benefits. To qualify for this group, all a person has to do is walk briskly for 30 to 60 minutes every day.

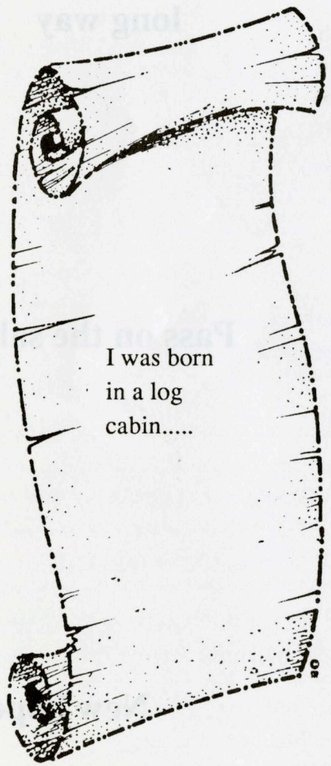
Pass on the salt

In a study involving two test groups: 1) 10 people aged 48 to 72, and 2) eight people aged 20 to 31, the influence of salt on older people's vessels was observed. Scientists speculate that hypertension results when blood vessels' receptors cause the vessel walls to constrict normally but not to dilate normally. (To maintain normal blood pressure, the walls need to constrict and dilate.) In the test, all the volunteers had normal blood pressure. They ate a high-salt diet for four days. On the fifth day, they were first injected with a drug to cause the vessels to contract followed by another injection to cause the vessels to dilate. The older group's blood vessels only dilated half as much as the younger group. The groups then went on a low-salt diet for four days. This time, the blood vessels of the older group dilated as much as the younger group. The study took place at the University of Iowa.

New hope?

Preliminary findings suggest that the drug deprenyl can impede the physical effects of Parkinson's disease (Nov. 16, New England Journal of Medicine). In the reported study, after a year of treatment only 97 of 399 Parkinson subjects on deprenyl or a combination treatment program became debilitated. Last June, the FDA approved deprenyl in concert with administration of the drug levodopa in severely ill Parkinson's patients.

Excerpts from the Life Member Stories Project



Status report....Our thanks to everyone who has contributed to the Life Member Stories Project. We have received approximately 250 responses along with photographs and even advertisements. Some of the stories were quite humorous, while others depicted the gravity and difficulties associated with the times. The next step is collating, indexing and (sigh) tying the pieces into a cohesive unit. We (keeping our fingers crossed) hope to have the book published in late 1990. We will keep you posted on the latest development through this newsletter.

Education. Remember this was the depression era, and where we lived -- in Mexico City -- there were not many choices of colleges. Where I could get the best support towards ''scholarship'' is where I turned to, and it was an excellent choice at the time - the National Autonomous University of Mexico. While going to college, there was an additional area of engineering that I was interested in: aeronautical engineering; but the career option did not exist at this university at the time. To make a long story short, when I graduated, I helped establish this option. Unfortunately, it later languished and finally disappeared.

Your field of technology -- history as YOU see it. This is the point for which I feel proud to have lived and worked during this period of time. Having played a part in the industrialization process of my country, and also the geographical region where I have been active for the last 25 years has given me the chance to help thousands of human beings. My work has permitted them to actively create something for themselves and their families.

Ing. R. H. Eberstadt

I was born Sydney Abramovitch in Winnipeg, Canada; the name was changed when the family moved to California in 1923. I took a vocational electrical course in high school, graduating in February 1930. The only job I could find was on a radio assembly line where I worked on as many as 200 radios a day at three cents a radio.

By fall, tired of this work, I enrolled in the Semi-Professional Electrical Engineering program at the Los Angeles City College (LACC). I graduated in 1932 with an Associate of Arts degree, an excellent foundation for my future work, but no job...and decided to continue my education. I entered Cal Tech as a junior (by examinations in math and physics) but left after about two weeks because of money problems and a difficulty in registering for freshman chemistry. (I hadn't planned to go on to college from LACC.) I returned to the junior college in 1933 to make up the chemistry, but a course in radio altered my plans.

In the fall of 1933, I entered the Radio Institute of California in Los Angeles. I was soon offered a part time job as a laboratory instructor and later, when the theory instructor left, I was invited to teach beginning radio theory. I stayed there until the fall of 1936 when I left to re-enter Cal Tech where I obtained my B.S. (with honors) in E.E. in 1938.

After a year a small geophysics company, I enrolled as a graduate student at the Ohio State University (OSU) where I received my M.S. degree in 1941. My thesis on the ''Calculation of Axially Symmetric Fields'' was published in two papers that have been referenced in the literature on electron optics. (My advisor offered to let me use it for my Ph.D. dissertation, but I was then too far from being able to satisfy the language requirement.)

Following the war, I worked for one year at Boeing, largely on the guidance elements for a ''ground to air pilotless aircraft.'' I left there in 1946 when I was offered an Assistant Professorship in E.E. to teach at the Wright Field Graduate Center of OSU with the opportunity to finish my Ph.D. I completed it in Physics in 1951.

Sidney Bertram, Ph.D.

The inspiration to become an ''Engineer'' came from Alexander Botts and the Earthworm Tractor stories which appeared in the Saturday Evening Post magazine. At the age of ten, I read books on civil engineering and learned the names of all the types of bridges. I also interviewed a prominent local civil engineer and expressed my interest in highways and bridges to him. He was not too encouraging. He told me that with a name like ''Caplan,'' I would find prejudice in a restricted field and that I would be better off to become an electrical engineer. Because firms like ''R.C.A.'' were unbiased and there would be more chances of a job in the electrical field then in civil engineering. With this in mind, I changed my basic interests to electricity.

The job [after the war] I took was with the local power company, Duquesne Light Company, Pittsburgh, P.A. I was hired and trained to be a power salesman in the commercial division. My job was to promote the use of electricity by designing fluorescent lighting, air conditioning, electric cooking for restaurants, miscellaneous electrical uses, and larger service entrances when required by the increased usage. On this job I learned utility rates, electrical distribution, wiring design, advanced lighting techniques, restaurant layout, air conditioning sizing, trouble shooting, diplomacy, and salesmanship. I designed new lighting for everything from a chicken coop for a farmer who wanted time clocks to fool the chickens, to a bordello whose owner didn't want to use very much light. In my job and travels, I met numerous architects, builders, property managers, and supermarket owners.

During my time at the Power Company, I received my Professional Engineering license. In 1955, a small shopping center was going into my territory. The plans were so bad that I sat down and redesigned the entire layout in order to get logical bids. After construction got under way, the owner called me into his office. He said, ''I understand you redesigned my whole job. Without your help, I would have been in big trouble. What do I owe you?'' I replied, that I did this work as part of my job at the Power Company and I did it for my benefit as well as his and that he owed me nothing. His reply was for me to pickup drawings for six more jobs and this time to send him a bill for time spent on this work after 5 P.M. He did not ask for a price.

This was the start of my career as an Electrical Consultant. My patron recommended me to other builders and to architects. Between 1955 and 1959, I had two part-time employees working every night and weekends out of my basement. When my income for part-time work exceeded my daytime salary, my accountant said I had to make up my mind whether to quit the Utility Company and go full time on my own, or to turn work away, as I could not do both. In 1959, I said good-bye to the power company and went full time as a Consulting Electrical Engineer.

Aubrey G. Caplan, P.E.

Electro/89. (left to right) Row 1: J. Fox , C. Muller, Mr. Stern, J. Rosenbaum, D. Molony, H. Ricardson, T.N. Chin, V. Siclari, L. Troupp, C. Agress. Row 2: W. Terry, H. Mahrous, D. Vitrogan, F. Link, S. Epstein, M. Grossman, C. W. Williams, R. Lowman. Row 3: J. Dietz, C. Lapinski, B. Gilman, S. Zywotow, J. Vogelman, R. O'Brien. Row 4: J. Monshaw, R. Goebel, A. Consentino, E. Becken, D. Erickson, M. Brailey. Row 5: A. Winzemer, E. Feher, L. Weinberg, A. Giordano, J. Minter, H. Dagavarian. Row 6: E. Keonjian, R. Koch, E. Elvove, R. Pintell.

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A proposal for utilizing an abandoned gold mine

Everyone has at sometime gotten a creative idea, in a dream or waking state, but never had a chance to do anything about it. Either lack of time or money, or unavailability of related information, or expert assistance created unsurmountable handicaps on its way to success. Most ideas become obsolete with the passing of time, but some are still valuable.

The Life Membership of IEEE represents a vast reservoir of unused know-how. My proposal is to create a loose cooperative for the development of the unused, but still valuable ideas-- unhindered by company policy, competitive considerations, intellectual isolation, etc.

The proposed development cooperative could start out as a computer Bulletin Board with an 800 number. This forum would discuss how the format should be shaped. At this point, the following aspects should be discussed.

1. Automatic record keeping for priority purposes (on the B.B. computer).
2. Registry of experts available for consultation and evaluation.
3. Data banks made accessible (Dialog, Patent search, etc.)
4. Legal assistance made available.
5. Facilities made available for experiments.
6. Financing made available for prototype building and testing.
7. Commercial services available for finding manufacturers.

This is just a sampling. Other topics will be brought up and resolved as each project develops. When a project is completed and commercially successful, the Cooperative should be reimbursed for the expenses; if excess income is generated from royalties, etc. It should be divided among the active participants proportionally to their contributions.

Most Life members have an excess of time and a lack of purpose. This Cooperative for enhancing creativity may lead to a healthy balance in both. What do you think?

Louis L. Mortor
Life Member

BB is here

IEEE has an electronic bulletin board. Not a whole lot is on it yet; but, the bulletin board does exist. E-mail conferencing among other bulletin boards is possible.

Terminal protocol requirements are:

Parity = none; data bits = 8; stop bits = 1; baud rates accepted are 300, 1200, 2400, and 9600 HST.

The number to dial is 201-981-9190. This is not an 800 number! So plan your calls accordingly.

Life members wishing to start an electronic bulletin board within their Section can do so easily. All the software needed is on the main IEEE electronic bulletin board ready to be downloaded. Now to get those fingers typing a bit faster and more accurately. Oh, to have taken a typing class.

Becoming a Life member

To qualify as an IEEE Life member, you must be 65 or older; and your current age and your number of years of IEEE, or its parent Societies (IRE or AIEE) membership, must total at least 100 years. You are notified automatically during the summer of the year you qualify as a Life member. The free IEEE membership is in effect as of January 1st of the following year.

Society Life membership is attained by holding a membership in a Society for five years prior to becoming an IEEE Life member. Life membership in a Society entitles the member to receive free of charge, the services and publication(s) included in the basic Society fee. The Life member must confirm each year that these services/publication(s) are still desired. The Society Life member has to pay for any additional publications the society offers and the member wants.

As a life member, you automatically receive SPECTRUM (unless you indicate 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, and so forth -- are available at regular member rates.

Where to write

Any ideas you would like to share? Opinions you wish to make known? Questions or problems that require assistance? Simply contact the Life Member Fund Committee or its Staff by writing to: IEEE Field Services, 445 Hoes Lane, P.O. Box 1331, Piscataway, N.J. 08855-1331.

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