

RELIABILITY SOCIETY NEWSLETTER



Editor: John Peter Rooney

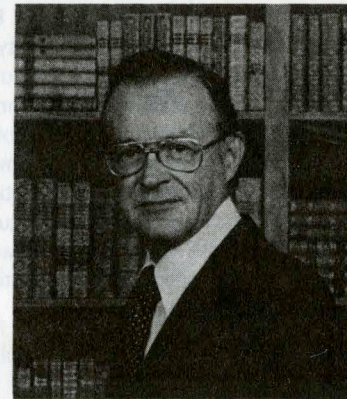
July, 1979—Vol. XXV—Issue 3 (USPS 460-200)

PRESIDENT'S REPORT

It is traditional for the incoming president to report the Society's affairs to the general membership of the Society. I do so through the media of the NEWSLETTER with the highlights of the Society's accomplishments for the year passed and of the goals and aspiration for the year ahead of us.

The Society's membership at the close of the year 31 December 1978 stood at 2819 active members. The year before, the active membership of the Society was 2662. We have thus experienced a modest growth of 5.9% which is encouraging but is not on par with 7.1% growth registered for all Societies/Groups of IEEE. The goal for 1979 was set at 8% growth which, if accomplished, would push the total society active membership over the 3000 mark.

Financially the Society is on solid footing. The 1978 actual income was \$129.9K and the actual expense \$127.2K. The modest surplus of \$2.7K was added to the Society accumulated reserve of \$46.7K. Of the \$129.9K income, 12.9% was derived from member fees, 15.2% from IEEE support and interest on reserve, 48% from periodicals, 4.6% from non periodicals, 18.3% from meetings and 1% from other sources. Of the \$127.2K expenses 46.8% was expanded on periodicals (transactions and Newsletter), 19% on non-periodicals, 15% on meetings, 18.4% on administration and 0.8% on other items.



The membership of our Society has been served well in 1978. We have five excellent issues of the TRANSACTIONS with a total of 400 pages plus page index. This was published at an average cost of \$6.8K per issue. The general membership received five issues of the Newsletter having on an average 12 pages/issue and published at an average cost of \$1.3K per issue. Each member received a bonus of the RAM Symposium Proceedings and the Physics of Failure Symposium Proceedings. The Society has sponsored and organized a number of Symposia and Conferences; supported Chapters through awards incentives, and has subsidized an annual awards luncheon at which the yearly Reliability Society Award is presented. Lastly, available to the general membership were Reliability Standards and Guides, educational activities of chapters, and ample op-

LONG TERM PLANS

V. Monshaw
RCA ASTRO-MS 107
Box 800
Princeton, NJ 08540
609-448-3400, Ext 2182

PRESIDENT

T.L. Regulinski, Ph.D.
P.O. Box 195
Dayton, OH 45402

VP PUBLICATIONS

A. O. Plait
Man-Tech Corp.
Century Suite 930
2341 Jefferson Davis
Arlington, VA 22202

VP MEETINGS

C. M. Bird
IBM Corporation
103 A334
Owego, NY 13827

SOCIETY FINANCES

T. Weir
Evaluation Assoc., Inc.
GSB Bldg
1 Belmont Ave.
Bala Cynwyd, PA 19004
215-667-3761

VP TECH. OPERATIONS

B. Retterer
Arinc Research
2551 Riva Road
Annapolis, MD 21401

VP MEMBERSHIP

J. E. Victor
Westinghouse
Box 746-MS 454
Baltimore, MD 21203

SECRETARY

N. J. McAfee
Westinghouse
Box 1693-MS 1267
Baltimore, MD 21203

TREASURER

I. A. Feigenbaum
COMSAT Laboratories
Clarksburg, MD 20734

portunities for active participation in ADCOM Committees working in such areas as: Nuclear Reliability and Safety, Human Performance Reliability, Software Reliability, International Reliability Activities, Maintainability, Advanced Reliability Devices, Standards and Definitions, and Publications.

Looking into and planning for the future, I have established an Ad Hoc Committee on Long Term plans whose goal will be to help ADCOM chart the future directions and commitments of the Society to its members and to the Institute. The Committee will examine the feasibility of such programs as: sponsoring a congressional fellow; organizing a Reliability study group on an exchange basis with European, Asian or South American countries; subsidizing a Reliability scholarship; establishing an University Chair of Reliability studies, and other possible programs.

I have also established an Ad Hoc Committee on Society Finances. This Committee will examine ways and means by which programs recommended by the Ad Hoc Committee on Long Term Plans could be implemented. The Committee will also assist ADCOM to chart long term financial commitments by examining potential sources of income, its budgeting for expenses, and its investments.

Presently, ADCOM Action Items include: (1) Expanding Tech Operations activities into new areas of Reliability involving solar energy systems, computer architecture and computer networks, (2) Development of home study Reliability course through IEEE press, (3) expanding the Society sponsorship base of national symposia/conferences in order to ascertain society's involvement in the mainstream of current major technological activities, (4) exploring the feasibility of preparing software reliability guide and a companion document dealing with human performance reliability in development of software systems, and (5) initiating fresh and imaginative efforts in membership drive.

To the general membership of the Society I would like to issue a special plea for involvement in the dynamics of the Chapter activities and in the work of the various ADCOM Committees. It is axiomatic that the strength of the Society lies in the professional activities at the various levels of the Society structure. This strength however is derived directly from the support of the general membership. It follows then that your involvement is crucial if the Society is to ascertain availability of professional development for its members and the propagation of Reliability discipline knowledge.

Lastly, I invite your direct communications of concerns, your suggestions or comments, your inquiries, your constructive criticism, and most welcomed of all your offer of direct involvement.

Dr. Thaddeus L. Regulinski
President

As of 1 July 1979 the new professional association of Dr. T. L. Regulinski will be:

Goodyear Aerospace Corporation
Litchfield Park, Arizona 85340
(602) 932-3232

The preferred professional mailing address is:

P. O. Box 295
Goodyear, Arizona 85338

AS I SEE IT

Some of you have seen the picture over my desk at work (or its equivalent at other places). It shows the picture of a horse and underneath, it says, "Quality (also read "Reliability") is like oats. If you want nice, fresh, clean oats, you expect to pay a fair price for them. However, if you're satisfied with oats that have already been through horse, well, that comes cheaper."

After "spreading the gospel" for over 25 years, the work still hasn't impressed the right levels. Not on either side of the fence: corporate management and government procurement specialists. But, that tough day is coming: it's going to really hit us in the pocket-book. Joe Juran, in recent articles that appeared in Quality and Quality Progress magazines, told us about it. So have others. The United States is losing its touch. Japanese and some European products are better than ours. Just what is wrong in Detroit? And where have Admiral, Magnavox, Zenith and the others gone? Just when are we going to wake up?

Maybe we have done what we can. It's time for the next generation to take over. But, what's frightening is that there doesn't seem to be one. Have any of you been advertising for R&M and QA types? What has the number and quality of response been? I haven't had much luck, myself.

Well, you won't have to listen to me grouse, anymore. As I said before, my other Reliability Ad Com duties have priority and I am turning over the reins of the Newsletter to John Peter Rooney. He works at an old, respected firm known for its conservative designs: Foxboro. Please welcome him and let me present him to you.

Until later—

Alan Plait

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Editor: John Peter Rooney, Old Colony Estates, 16 Sansome Street, Plymouth, MA 02360.

TREASURER'S REPORT

Irwin A. Feigenbaum

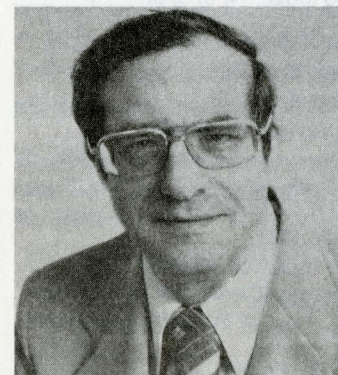
Having taken over the duties of Reliability Society Treasurer in January of this year, this is my first report to the membership. I will attempt to continue to keep you informed of our financial status in the same manner as my predecessor, Paul Gottfried. We all owe him a vote of thanks for the excellent job he has done during the past four years.

Financially, the Reliability Society had another surplus for 1978. The final financial report for last year indicated a surplus of \$3800 which brought our reserves up to \$46,700. While the surplus for 1978 was considerably less than the surpluses for 1976 and 1977, it provided a continued level of reserves which is considered reasonable with respect to the size of our annual budget and the advances needed for the symposia we sponsor.

The reserves are high enough to provide continuation of such extra services as automatic distribution of symposia proceedings to members and expansion of Transactions of Newsletters. Also, they allow us to keep our society membership fees at the same level even though expenses are increasing due to inflation.

Present indications are that there will be a deficit in 1979 based upon assumptions that income will remain relatively stable and expenses will increase due to inflation. Our official 1979 budget provides for an estimated deficit of \$16,700. However, this deficit will probably be lower due to higher anticipated reserves expected from Transactions sales and symposia meeting receipts. Condensed figures for 1978 actuals and the 1979 budget are as follows:

Category	INCOME		EXPENSES	
	1978 Actual	1979 Budget	1978 Actual	1979 Budget
Membership Fees	\$ 16,800	\$ 17,100	\$ 1,300	\$ 1,000
Publications				
Transactions	62,800	60,800	60,200	69,600
Newsletters	—	—	6,500	6,000
Conference Pubs.	5,500	6,500	15,700	24,700
Meetings	23,800	21,700	19,100	20,000
IEEE Support	16,000	16,000	18,600	23,000
Awards	—	—	700	1,000
Other	4,800	11,400	3,800	4,900
TOTAL	129,700	133,500	125,900	150,200



IRWIN A. FEIGENBAUM
Treasurer

Mr. Feigenbaum was appointed Treasurer of the Reliability Society in January of this year. He is a member of the Technical Staff of the Reliability and Quality Assurance Laboratory at COMSAT Laboratories, Clarksburg, Maryland. He is responsible for im-

plementing reliability, quality assurance, and component part programs associated with COMSAT satellite and earth station applications.

Before joining COMSAT in 1973, Mr. Feigenbaum had over twenty years of experience in reliability, components engineering, standards, and quality assurance activities. His prior positions included Manager of Components Engineering at Litton Industries and Manager of Parts, Materials and Processes in the Reliability Section of the General Electric Company Reentry Systems Division. He also had prior positions in reliability, standards, and components engineering with the Department of Defense.

Mr. Feigenbaum received a B.S.E.E. degree from Newark College of Engineering in 1949 and an M.S.E.E. degree from Rutgers University in 1955. He is a member of the IEEE Components, Hybrids, and Manufacturing Technology Society and the IEEE Electron Devices Society in addition to being a member of the IEEE Reliability Society. He is a Past Chairman of the Washington, D.C. Chapter of the IEEE Reliability Group, and a Past Chairman of the Philadelphia Chapter of the IEEE Component Parts Group. He previously served on the IEEE Reliability Group National Administrative Committee as Assistant Treasurer.

ALAN PLAIT

Vice President

Publications, AdCom Reliability Society

Alan's initial association with IEEE began as a student at Illinois Tech, in 1957. His first major position was as editor of the IEEE (IRE) newsletter in the Fort Wayne, Indiana section. Since then, he advanced through the elected positions to Chairman of the National Capital Reliability Chapter. Alan also became active in ASQC, becoming Chairman of the Washington, DC Chapter (1973-74), Program Vice Chairman of the 1972 Annual Technical Conference, and elected a Fellow in 1974. He has held a number of positions in IEEE, sponsored conferences, such as the Reliability Physics Symposium, and has founded, coordinated and taught in the highly successful RAM Symposium tutorial sessions for the past five years. He is also a member of NSPE, and a Fellow of the Washington Academy of Sciences.

Alan obtained a BS Math (1951) and BSEE (1957) from Illinois Tech and an MS Systems Engineering (1975) from Virginia Tech. He is a

member of such honorary societies as Eta Kappa Nu, Tau Beta Pi, Pi Delta Epsilon (Journalism) and Rho Epsilon (Radio Engineering). He is listed in American Men and Women in Science and Engineering.

As an avocation, Alan teaches at the U.S. Department of Agriculture's Graduate School (since 1963), and has taught mathematics, electronics, mechanical engineering, reliability, and quality statistics at such institutions as Illinois Tech, George Washington University, Virginia Tech, and the University of Connecticut.

Alan is a Staff Advisor in Reliability and Systems Engineering at ManTech of New Jersey Corporation's Advanced Support Technology Division. In the past, he has been associated with Armour Research Foundation (now IITRI), Magnavox, Melpar, and Computer Sciences Corporation.

He and his wife Evelyn live in Springfield, Virginia.

RELIABILITY SOCIETY CHAPTER CHAIRMEN

SOCIETY PRESIDENT

T. L. Regulinski
AFIT (ENG)
Wright Patterson AFB, OH 45433

BALTIMORE

W. C. Blackwell, Jr.
P. O. Box 746
Baltimore, MD 21203

BINGHAMTON

Joseph J. Rexford
20 Merrill Road
Binghamton, NY 13905

CANAVERAL

Robert H. Fuenfhausen
2606 Plantation Drive
Melbourne, FL 32901

CENTRAL NEW ENGLAND

L. Renfroe
Assurance Technology
1 River Road
Carlisle, MA 01741

CHICAGO

Raymond L. Schirmer
3919 Gull Court
Rolling Meadows, IL 60008

CLEVELAND

W. R. Lalli
21000 Brookpark Road
M S 500 211
Cleveland, OH 44135

CONNECTICUT

David J. Finnicum
3 Punkin Drive
Ellington, CT 06029

FLORIDA

Charles M. Krzesicki
14060 102nd Ave. N.
Largo, FL 33540

LOS ANGELES

I. Doshay
380 Surviv Drive
Pacific Palisades, CA 90272

CHAPTERS CHAIRMAN

Henry A. Malec
ITT/TTC
1 Research Drive
Shelton, CT 06484

MOHAWK VALLEY

Alfred Tabmurrino
RADC/RBRP
Griffiss AFB, NY 13441

MONTREAL

Michel Perrachon
876 Jean Plouf
Boucherville Que. Canada
J4B 3H3

NEW JERSEY COAST

Bernard Meyer
Stony Hill Road, Apt. 259B
Eatontown, NJ 07724

NEW YORK/LONG ISLAND

J. J. Drvostep
424 East 75th Street
New York, NY 10021

NORTH JERSEY

Rafael J. Hernandez
324-B Hackensack Street
Wood-Ridge, NJ 07075f

PHILADELPHIA

William R. Waltz
57 Nutt Road
Phoenixville, PA 19460

SANTA CLARA VALLEY

Giorgio Riga
1489 Knowlton Drive
Sunnyvale, CA 94087

TWIN CITIES

John W. Center
1006 Mercury Drive
Saint Paul, MN 55112

WASHINGTON, D.C.

Clark L. Hackley
1755 Jefferson Davis Hwy.
Arlington, VA 22202

CHAPTER NEWS

The Chapter Awards were presented at the Awards luncheon on January 23, 1979 at the RAMS. The first, second, and third awards were presented per the awards rules. Each of the three chapter chairmen also received a current book and a framed certificate. Individual letters of congratulations were sent to the 4th thru 10th place chapter winners along with their chapter awards of \$15 of stamps. Ten of the eighteen chapters entered the yearly IEEE Reliability Society Awards Program.

CHAPTER AWARDS 1977-1978

Congratulations to:

Chapter of the Year Award:

MOHAWK VALLEY CHAPTER—Anthony Coppola

Second Place Award:

LOS ANGELES CHAPTER—I. Doshay

Third Place Award:

BOSTON CHAPTER—William McCabe

Fourth Place—Tenth Place Awards:

Baltimore

Raymond H. Seidl

Chicago

Henry A. Malec

Cleveland

Vince R. Lalli

Montreal

Michel Perrachon

New York/Long Island

Joseph Drvostep

North Jersey

Rafael J. Hernandez

Washington, DC

J. Maycock

Boulder, Colorado Possible Chapter?

The ad in the October 1978 issue of the Reliability Society Newsletter for new area chapters was answered proposing a specific new chapter in the Boulder, Colorado area. If there are any other society members wishing to join or start a chapter, please contact Henry A. Malec, Chapter Activities Chairman, at ITT-Telecommunications Technology Center, 1 Research Drive, Shelton, Connecticut 06484.

New York/Long Island

The following candidates were nominated for the offices of the New York/Long Island Chapter, for the term of July 1, 1979 to June 30, 1980:

Chairman: Donald W. Matteson, Hazeltine Corp.

Vice-Chairman: Victor J. Bonardi, Fairchild Republic Corp.

Secretary-Treasurer: Joseph J. Drvostep, Grumman Aerospace Corp.

Publicity & Facilities Chairman: Joseph J. Gerry, Hartman Systems

During the past season, the New York/Long Island Chapter participated in five meetings, including the Annual Logistics Symposium, held at Adelphi University, April 24, 1979.

Attendance at this year's Chapter's meetings was an improvement over the 1977-1978 season, and a more diversified program was offered to the members.

CHAPTER AWARDS

The Reliability Society has established "Reliability Society Chapter Awards" as a means of recognizing local chapters' efforts to improve their services to members.

The purpose of this award is to motivate Chapters and especially Chapter officers to structure as complete a program as is possible in their Chapter in order to encourage advances in all professional areas of Reliability.

The "Reliability Society Chapter Awards" consist of the following:

1. *First Place*—The award for first place will consist of providing the Chapter with a planned program for one of their regular meetings. An outstanding speaker(s) will be selected to present a topic to the Chapter on a subject that is of general interest to the Chapter. A maximum of \$500.00 for expenses for this speaker will be paid by the AdCom. A suitable award will be given to the Chapter Chairman.

This Chapter meeting will not be "counted" in scoring for the following year's awards.

2. *Second Place*—The award for second place will be \$150.00, plus a suitable award for the Chapter Chairman.

3. *Third Place*—The award for third place will be \$100.00, plus a suitable award for the Chapter Chairman.

4. *All other entrants*—The award for fourth place, etc. will be 300 first class stamps for chapter meeting notices.

(NOTE: The second and third place cash awards are checks to be used only by the respective Reliability Chapters for improving their professional status).

No tie will be allowed and the judgment of the Society Awards Committee will be final. Meeting records, furnished by the Chapter as verified by the Society Awards Committee, will be used for all point measurement.

The award will be on a yearly basis with the period of measurement from July 1 to the following June 30.

To qualify for an award, a Chapter must be in operation and be authorized by IEEE prior to July 1 of the measurement period. The awards will be made by the AdCom upon recommendation of the Society Awards Committee.

The "Reliability Society Chapter Awards" are presented on the basis of total points from the following:

1. Number of Meetings

200 points will be earned for every meeting in excess of 4 per year in which a Chapter participates. Joint meetings with other Chapters or the section and symposiums will count for this item.

2. Symposium or Conference

500 points will be earned for each day long symposium or conference arranged and sponsored. 250 points will be earned for such activity co-sponsored by a chapter. 100 additional points will be earned if transactions are published for the conference.

3. Training

500 (250) points will be earned for the first sponsored (co-sponsored) training course and 250 (125) points for each addi-

tional course sponsored (co-sponsored) in the year by a Chapter. The training course can be one of those prepared by the S-7 AdCom or can be one at the college or university level which is motivated by the Chapter. To be eligible for these points, the Chapter must supply a written description of the course.

4. Written Papers and Meeting Participation

100 points will be earned for a reliability paper authored or co-authored by a member of this chapter if selected for presentation at, or published by, a meeting, conference or symposium. If selected for the RAMS, an additional 100 points will be earned.

For each paper written by a member of this chapter and published in the S-7 IEEE Transactions 200 points will be earned.

100 points will be earned for each chapter member participating as a session organizer, moderator, or panel member at a conference or symposium.

100 points will be earned for each chapter member participating as a speaker or a panel member at a meeting.

5. Newsletter Items

200 points per Newsletter will be earned for a Chapter when it has submitted information to the Newsletter editor which is actually published. The points will be earned for each Newsletter in which such Chapter information appears.

6. Membership

50 points will be earned for each percentage-point increase in chapter membership.

Please mail all chapter news items to:

John Peter Rooney
Editor, Newsletter
Old Colony Estates
16 Sansome Street
Plymouth, MA 02360

ELIGIBLE FOR SENIOR MEMBERSHIP?

At the April 6, 1979 meeting of the Reliability Society's Administrative Committee, it was voted to recommend that all members of the Reliability Society consider upgrading to Senior Member, IEEE, if they are eligible.

How about you?

SENIOR MEMBER GRADE

Senior Member is the highest professional grade for which application may be made and shall require experience reflecting professional maturity. For admission or transfer to the grade of Senior Member, a candidate shall be an engineer, scientist, educator, technical executive or originator in the fields of electrical or electronics engineering and science, radio, allied branches of engineering or related arts and sciences.

The candidate shall have been in active professional practice for at least ten years and shall have shown significant performance over a period of at least five of those years, such performance including one or more of the following:

- Publication of engineering or scientific papers, books or inventions, or
- Technical direction with evidence of accomplishment of important scientific or engineering work, or
- Recognized contributions to the welfare of the scientific or engineering profession, or
- Development or furtherance of important scientific or engineering courses in a "school of recognized standing," or
- Contributions equivalent to those of "a" to "d" above in areas such as technical editing, patent prosecution or patent law, provided these contributions serve to advance progress substantially in the fields of electrical or electronics engineering, radio, allied branches of engineering or the related arts and sciences.

The proper forms are available from IEEE Headquarters. If you qualify, or think you might, why not get the procedure in motion?

And!, for future reference:

FELLOW GRADE

The grade of Fellow is one of unusual professional distinction and shall be conferred only by invitation of the Board of Directors upon a person of outstanding and extraordinary qualifications and experience in the fields of electrical engineering, electronics, radio, allied branches of engineering or the related arts and sciences, who has made important individual contributions to one or more of these fields. The year of election to the grade of Fellow is the year following affirmative action by the Board of Directors in conferring the grade of Fellow. The candidate shall hold Senior Member grade at the time the nomination is submitted and shall have been a member in any grade for a period of five years or more preceding January 1 of the year of election.

IEEE Members Honored By Eta Kappa Nu

Eta Kappa Nu, the electrical engineering honor society, has selected Richard E. Birney as the Outstanding Young Electrical Engineer in the U.S. for 1978. Mr. Birney is a member of the technical staff at IBM Corp. in Boca Raton, Fla.

The Jury of Award also selected David W. McElroy for Honorable Mention. Mr. McElroy is a technical staff member at Westinghouse Corp. in Sharon, PA.

The HKN recognition is awarded annually to young electrical engineering graduates for meritorious service in the interests of their fellow men as well as outstanding achievements in their chosen profession.

The presentation of the awards was made at the 43rd Annual Award Dinner on April 23, 1979 at the New York Sheraton Hotel in New York City.

IEEE Professional Communication Society Offers Proven Home-Study Writing Course

Over 200 engineers and other technical specialists have enrolled in the PCS-sponsored home-study writing course since its inception in late 1977. This course, entitled "Technically-Write!" and developed by Ronald S. Blicq, is specifically structured for engineers and scientists who want to master the communications techniques essential to their career advancement.

Each student who enrolls in this home-study course is assigned to an instructor who is experienced in the communications field. Students mail completed assignments to their individual instructor who appraises their work and returns practical comments. This personalized attention and easy-paced teaching approach is structured to help individuals with undeveloped writing skills advance rapidly to confident control of various communication techniques.

Eleven "information packages" cover such topics as technical reports, letter writing, job and project descriptions, resumes, and technical articles. Students learn how to recognize communications that may be ignored or misinterpreted, as well as how to write to get the desired attention or action. The course usually requires 3 to 4 months to complete.

Those interested in enrolling in this course may do so by contacting the IEEE Continuing Education, 445 Hoes Lane, Piscataway, NJ 08854. The price for IEEE members is \$80.00, while the price for non-members is \$105.00. The cost of such a course is often borne by the student's company, and is almost always considered to be a tax-deductible expense.

EAB Introduces Microprocessor Home-Study Course

Heath Company's ETS-3400 with miniature digital computer can now be obtained through IEEE by IEEE Members, their associates and colleagues. This self-instruction program covers microprocessor basics, computer arithmetic, programming, interfacing and much more in a logical, easily understood manner.

The program is complete with 62 electronic components required to complete the experiments. These components include: two 2112 256 x 4-bit RAMs; 6820PIA interface chip; 1406 digital analog converter; 741 and 301 op amps and a variety of other microprocessor-oriented devices.

Those who complete the course and obtain a 70% or better grade on the final examination, the Institute will award 8.0 Continuing Education Achievements Units (CEAU's).

Please specify full title—Heath Kit ETS-3400 Microprocessor Course—when writing.

Because we want our members to continually advance in their careers, we are underwriting—for IEEE members only—a rebate of \$35.00 upon proof of satisfactory completion of this course provided the course is ordered through IEEE. If you are interested in enrolling or only seeking further information, we invite you to write to: IEEE Education Registrar, 345 East 47th St., New York, N.Y. 10017.

Please specify full title—Heath Kit ETS-3400 Microprocessor Course—when writing.

Technical Reading: Moving Right Along

Is there an engineer in the universe who hasn't looked to the heavens and asked, "How in the blankety-blank can I get through all this blankety-blank reading?"

Many have asked the question...and many have done something about it. In fact, engineers from all over the U.S. report that they're now moving right along with their technical reading...and they're crediting their success to the Speed Learning reading techniques offered in two programs by IEEE. Our classroom program is called, "Advanced Technical Reading." It's a 3-day intensive program that we'll run "in-house" for you. The home-study version of the course is called "Speed Learning."

As one General Electric engineer described the course, "It gives you a system for handling written material more intelligently, with speed as icing on the cake." If you're interested in moving right along with your technical reading, let's hear from you. Call V. J. Giardina, (201) 981-0060 Ext. 174/175.

IEEE Centennial

The year 1984 marks the one-hundredth anniversary of the founding of the American Institute of Electrical Engineers (AIEE). The IEEE, formed by a merger of the AIEE and the Institute of Radio Engineers (IRE), will celebrate its centennial during the year beginning Jan. 1, 1984.

Two committees have been appointed to plan for this major event. The first, primarily an honorary group is the Centennial Committee, to be chaired each year through 1984 by the incumbent IEEE President. Its other members are: John Bardeen, Patrick E. Haggerty, William R. Hewlett, William C. Norris, Robert N. Noyce, Simon Ramo, John W. Simpson, and Charles H. Townes.

The working group for Centennial planning is called the Centennial Task Force. With John D. Ryder as the chairman, the Task Force has the following membership: Nathan Cohn, Robert F. Cotellessa, Lawrence P. Grayson, Donald T. Michael, William W. Middleton and M. E. Van Valkenburg. The Task Force will soon begin actively considering possible centennial activities. Suggestions should be directed to Reed Crone, Staff Secretary of the Centennial Task Force, IEEE Headquarters, (212) 664-7557.

Age Discrimination Practices

Interested members are reminded of a booklet on this subject, previously announced, which is still available from IEEE.

The purpose of the Age Discrimination in Employment Act is "to promote employment of older persons based on their ability rather than age, to prohibit age discrimination in employment, to help employers and workers find ways of meeting problems arising from the impact of age on employment."

The booklet covers pertinent provisions of the Age Discrimination in Employment Act of 1967 with its 1978 amendments, issues "red flag" warning signals on detection and assessment of age discrimination, and offers guidelines for action. An appendix provides a list of offices to contact in suspected cases.

Copies are available from the IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. Ask for publication IEEE Cat. No. UH0131-3. Members—\$3; non-members—\$6.

CALL FOR PAPERS

**SRE-80 RELIABILITY SYMPOSIUM
TIE TRANSPORTATION INFORMATION AND ENERGY**

A Symposium dealing with Reliability, Maintainability and Safety of Transportation, Information and Energy systems is being sponsored by the SRE. Emphasis is being placed on problems and solutions to enhance operational efficiency and reduce downtime.

SRE-80, TIE, will pay special attention to the practical approach, and papers are especially solicited in this area. However, theoretical papers will be considered if they include new features and extend the state-of-the-art. Papers should deal with work in the fields shown on the attached "Fault Tree."

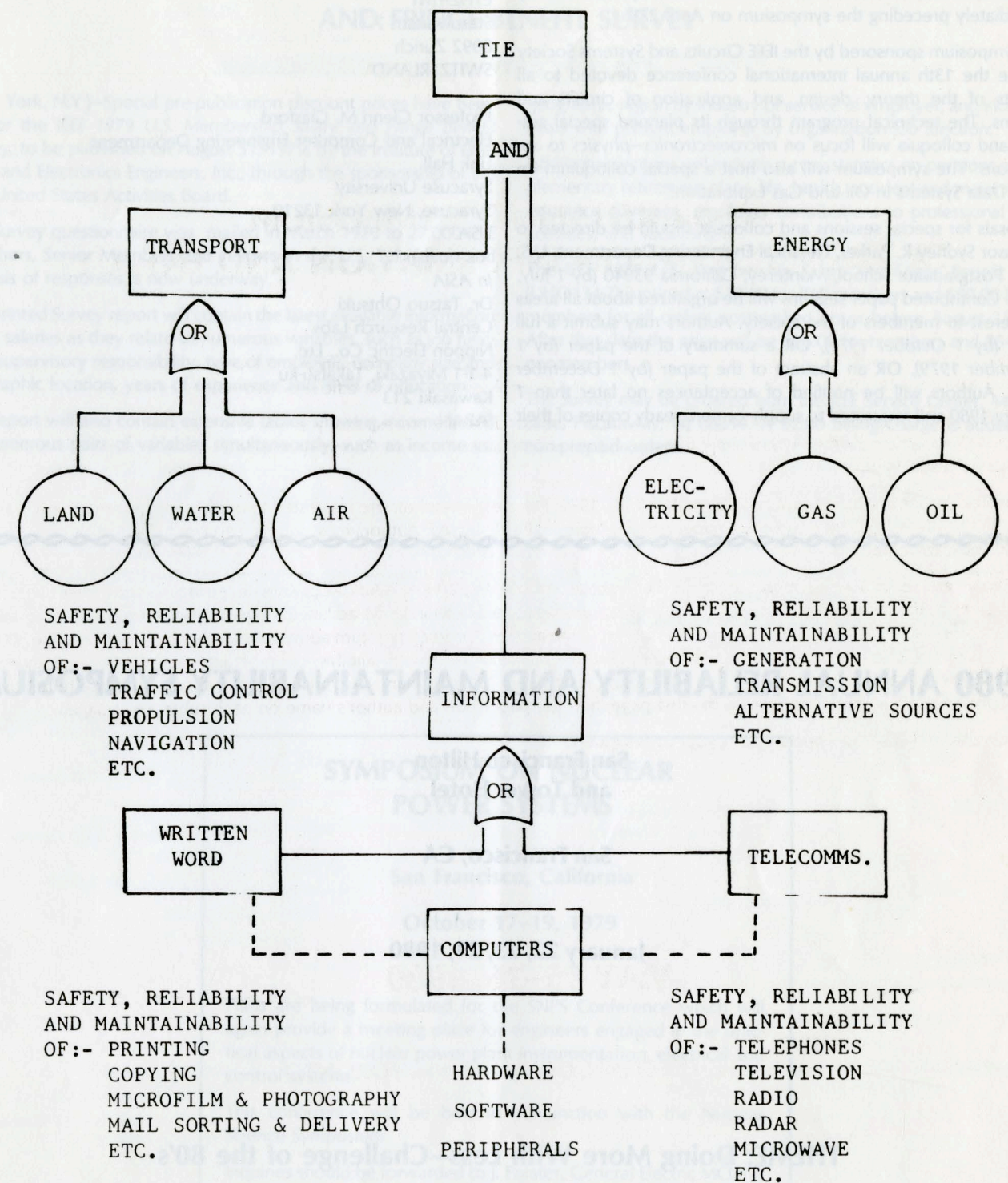
The deadline for submission of papers is December 15th, 1979. Prospective authors are requested to notify the program chairman before July 31, 1979 of their intention to submit a paper and the topics to be discussed. Authors must submit a 50 word descriptive abstract and a 300-500 word summary.

Both abstract and summary must clearly state: 1) The Purpose of the Work, 2) How it Advances Knowledge in the appropriate subject, and 3) The Results of the Investigation. The 50 word abstract, suitable for publication in the advance program, should be typed on a separate sheet and include the title of the talk, name and affiliation of the author(s), complete return address, and telephone number. The 300-500 word summary must be submitted in a single-sided, double space typewritten format suitable for immediate reproduction and review purposes. No photographs are permitted because of printing restrictions. The title, name and affiliation of authors, complete return address and telephone number should appear on the first page, and the paper title and author's name on each subsequent page.

Please circulate this Call for Papers within your organization.

MAY 15-16, 1980

HOLIDAY INN, DOWNTOWN, TORONTO



CALL FOR PAPERS

ISCAS/80 will be held at the Shamrock Hilton Hotel, Houston Texas, USA, April 28-30, 1980. Workshops will be conducted by the various technical committees of the Circuits and Systems Society immediately preceding the symposium on April 27th.

The symposium sponsored by the IEEE Circuits and Systems Society will be the 13th annual international conference devoted to all aspects of the *theory, design, and application* of circuits and systems. The technical program through its planned special sessions and colloquia will focus on *microelectronics-physcis to applications*. The symposium will also host a special colloquium on Large Data Systems in Oil and Gas Exploration.

Proposals for special sessions and colloquia should be directed to Professor Sydney R. Parker, Electrical Engineering Department, U.S. Naval Postgraduate School, Monterey, California 93940 (by 1 July, 1979). Contributed paper sessions will be organized about all areas of interest to members of the society. Authors may submit a full paper (by 1 October 1979), OR a summary of the paper (by 1 November 1979), OR an abstract of the paper (by 1 December 1979). Authors will be notified of acceptances no later than 1 January 1980 and requested to supply camera ready copies of their

papers no later than 1 February 1980. Authors should submit three copies of their material to

IN EUROPE
Dr. George S. Moschytz
ETHZ-FMT
Sternwartstr. 7
8092 Zurich
SWITZERLAND

Professor Glenn M. Glasford
Electrical and Computer Engineering Department
Link Hall
Syracuse University
Syracuse, New York 13210
USA

In ASIA
Dr. Tatsuo Ohtsuki
Central Research Labs
Nippon Electric Co., Ltd.
4-1-1 Miyazaki, Takatsu-ku
Kawasaki 213
JAPAN

1980 ANNUAL RELIABILITY AND MAINTAINABILITY SYMPOSIUM

San Francisco Hilton
and Tower Hotel

San Francisco, CA

January 22, 23, 24, 1980

THEME: Doing More With Less—Challenge of the 80's

IEEE ANNOUNCES SPECIAL PRE-PUBLICATION PRICE ON 1979 SALARY AND FRINGE BENEFIT SURVEY

(New York, N.Y.)—Special pre-publication discount prices have been set for the *IEEE 1979 U.S. Membership Salary and Fringe Benefit Survey*, to be published on August 31, 1979, by the Institute of Electrical and Electronics Engineers, Inc., through the sponsorship of the IEEE United States Activities Board.

The Survey questionnaire was mailed in March 1979 to 27,000 IEEE Members, Senior Members and Fellows in the U.S. Tabulation and analysis of responses is now underway.

The printed Survey report will contain the latest available information on EE salaries as they relate to numerous variables, such as job function, supervisory responsibility, type of employer, company size and geographic location, years of experience and level of education.

The report will also contain extensive tables showing income based on numerous pairs of variables simultaneously, such as income vs.

geographic region by industry or service of employer, and income vs. years with present employer by organization job function.

Additional sections will include survey statistics on pensions and supplementary retirement plans, life, health, accident and major medical insurance coverage, employer contributions to professional society activities, and vacations.

The *IEEE 1979 U.S. Membership Salary and Fringe Benefit Survey* (UHO134-7) is priced at \$32.00 for IEEE members and \$50.00 for nonmembers for all orders postmarked on or before August 31, 1979. After that date the price will be \$36.00 for members and \$54.00 for nonmembers.

The Survey may be ordered from the IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. A \$2.00 billing charge is added to all non-prepaid orders.

SYMPOSIUM ON NUCLEAR POWER SYSTEMS

San Francisco, California

October 17-19, 1979

Plans are being formulated for the SNPS Conference which will again provide a meeting place for engineers engaged in the practical aspects of nuclear power plant instrumentation, electrical and control systems.

This conference will be held in conjunction with the Nuclear Science Symposium.

Inquiries should be forwarded to J. Forster, General Electric MC014, 175 Curtner Ave., San Jose, California 95125.
Tel. (408) 925-2131.

CONFERENCE SCHEDULE

DATE(S)	CONFERENCE	LOCATION	INFO CONTACT
JULY			
July 15-20	Power Engineering Society Summer Meeting Sponsors: PE Exhibit: No Est. Attendees: 1500	Hotel Vancouver Vancouver, B.C. Canada	H. Goldie 555 W. Hastings St. Vancouver, BC, Canada V6B 4T6 (604) 663-2310
July 16-20	Annual Conference on Nuclear & Space Radiation Effects Sponsors: IEEE/NPS Radiation Effects Committee DNA, U. of Calif.	Santa Cruz, Calif.	J. P. Raymond Mission Research Corp. P.O. Box 1209 La Jolla, CA. 92037
July 17-19	Int'l Symposium on Circuits & Systems Sponsors: CAS, IECI	Tokyo, Japan	Kazuo Horiuchi Dept. of Elect. & Comm. Engr. Waseda University Shinjuku, Tokyo, 160 Japan
July 17-20	Joint Intermag and Magnetism & Magnetic Materials Conference Sponsors: MAG, AIP Exhibit: Yes Est. Attendees: 800	The Statler Hilton New York	F. E. Luborsky General Electric R&D Center P.O. Box 8 Schenectady, NY 12301
AUGUST			
Aug. 5-10	Intersociety Energy Conversion Engr. Conference "IECEC" Sponsors: ED, AES Exhibit: No	Sheraton Boston Hotel Boston, Mass.	James E. Mitchell Corporate Research Lab Exxon Research & Engineering C Linden, NJ 07036 (201) 474-2966
Aug. 6-8	Pattern Recognition and Image Processing Sponsors: C	Hyatt Regency Chicago O'Hare Chicago, IL	Pattern Recognition P.O. Box 639 Silver Spring, MD 20901 (301) 439-7007

DATE(S)	CONFERENCE	LOCATION	INFO CONTACT
Aug. 21-24	1979 International Conference on Parallel Processing Sponsors: C Est. Attendees: 190	Shanty Creek Lodge Bellaire, MI 49615	T. Feng Dept. of Elec. & Computer Engr. Wayne State University Detroit, MI 48202 (313) 577-3920
SEPTEMBER			
Sept 4-6	1979 Progress in Overhead Lines and Cables for 220 kV Sponsors: IEEE UKRI Section	London, England	P. M. Elliott Conference Dept. IERE 99 Gower Street London WC1E 6AZ, England
Sept 4-7	Comcon Fall Sponsors: C	Capital Hilton Hotel Washington, DC	Harry Hayman Comcon Fall '79 P.O. Box 639 Silver Spring, MD 20901 (301) 439-7007
Sept 10-11	Int'l Meeting on Magnetic Recording on Particulate Media Sponsors: MAG, Div. of the GNSM (National Res. Comm.), Italy	Gardone Riviera (Brescia) Italy	Dr. Ariello R. Corradi Sonorex, S.P.A. Via Bonfadina 14 I-25046 Cazzago S.M. (Brescia), Italy
Sept. 10-12	Petroleum & Chemical Industry Technical Conference Sponsors: IA Exhibit: No Est. Attendees: 600	Del Coronado Hotel San Diego, Calif.	R. M. Jackson P.O. Box 7600 Union Oil Co. of Calif. Los Angeles, Calif. 90051 (213) 486-6417
Sept 17-19	Engineering in the Ocean Environment (Ocean '79) Sponsors: OEC, IEEE San Diego Sec., MTS Exhibit: Yes Est. Attendees: 1100	Town & Country Hotel San Diego, Calif.	Dr. Howard L. Blood NOSC 271 Catalina Ave. San Diego, CA 92152 225-7275
Sept 17-19	The Fourth Int'l Conference on Software Engineering Sponsors: C, ACM (Co-sponsorship)	Munich, Germany	Prof. Fritz Bauer Institut for Informatik Der Technischen Universitat, D-8 Munchen 2 Arcisstrasse 21 Postfach 90 94 90 Germany
Sept 18-20	5th European Solid State Circuits Conference Esscirc '79 Sponsors: IEE, Reg. 8, Eurel, IMA, IOP, IERE Exhibit: No Est. Attendees: 300	Univ. of Southampton England	IEE Conference Dept. Savoy Place London WC2R OBL, England Tele: 01-240-1871
Sept 18-20	Western Electronic Show & Convention (WESCON) Sponsors: Los Angeles & San Francisco Councils Exhibit: Yes	San Francisco, Calif.	Dale Litherland 999 N. Seouleva Blvd. El Segundo, Calif. 90245 (213) 772-2965

DATE(S)	CONFERENCE	LOCATION	INFO CONTACT
Sept 19-21	Automatic Support Systems for Advanced Maintainability (Autotestcon) Sponsors: AES, IM, IEEE Twin Cities Section, AIAA Support Systems, TC Exhibit: Yes Est. Attendees: 500	Radisson Hotel (Downtown) Minneapolis, MN.	A. O. Thornsjo Honeywell Inc. 1625 Zarthan Ave. South St. Louis Park, MN 55416 (612) 542-4811 Frank Medved, Program Chairman (612) 542-5495
Sept 24-26	Instrumentation in Aerospace Simulation Facilities Int'l Congress Sponsors: AES Exhibit: No	Naval Postgraduate School Monterey, CA	Dr. A. Shreeve Code 67 SF Dept. of Aeronautics Naval Postgraduate School Monterey, CA 93940 (408) 646-2312
Sept 26-27	Ultrasonics Symp. Sponsors: SU	Monteleone Hotel New Orleans, LA.	G. A. Alers Rockwell International P.O. Box 1085 1049 Camino Dos Rios Thousand Oaks, Calif. 91360 (805) 498-4545 Ext. 183
Sept 30 Oct. 4	Industry Applications Society Annual Meeting Sponsors: IA Exhibit: No	Bond Court Cleveland, Ohio	Henry W. Wearsch Reliance Electric Co. 24800 Tungsten Road Cleveland, Ohio 44117 (216) 266-6289

OCTOBER

Oct. 1-2	First ASSP Workshop on Two-Dimensional Signal Processing Sponsors: ASSP Exhibit: No	Lawrence Hall of Science University of California Berkeley, CA	Dr. Dennis M. Goodman, L 156 Lawrence Livermore Laboratory P.O. Box 5504 Livermore, CA 94550 (415) 422-8186
Oct. 2-4	Intl Electrical and Electronics Conf. and Exposition (IEEC & E) Sponsors: Canadian Region Exhibit: Yes Est. Attendees: 15000	Sheraton Centre Toronto, Canada Conf. at Automotive Bldg of the National Exhibition in Toronto	IEEE Canada Office 7061 Yonge Street Thornhill, Ont., Canada L3T 2A6 (416) 881-1930
Oct. 2-5	First International Conference on Distributed Computing Systems Sponsors: C	Huntsville, AL	B. D. Carroll Electrical Engineering Auburn University 207 Dunston Hall Auburn, AL 36830 (205) 826-4330
Oct. 3-5	5th Int'l Conference on Very Large Data Bases Sponsors: C	National Hotel Rio de Janeiro, Brazil	Prof. Stanley Y. W. Su 500 A Weil Hall Univ. of Florida Gainesville, Fla. 32611 (904) 392-2371
Oct. 6-7	Frontiers of Engineering in Health Care Sponsors: EMB Exhibit: Yes Est. Attendees: 400	Denver Hilton Hotel Denver, CO	Morton D. Schwartz, Ph.D. California State University Long Beach, CA 90840 (213) 498-5102

DATE(S)	CONFERENCE	LOCATION	INFO CONTACT
Oct. 7-11	1979 Joint Power Generation Conference Sponsors: ASME/ASCE/PES IEEE	Radisson Plaza Hotel Charlotte, North Carolina	Harold K. Couch Brown & Morrison P.O. Box 4307 Charlotte, NC 28204 (704) 333-0774
Oct. 8-9	Symposium on Hardware Descriptive Languages Sponsors: C	Palo Alto, CA	Waldo Magnuson Lawrence Livermore Labs P.O. Box L-156 Livermore, CA 94550 (415) 422-9550
Oct. 8-10	Engineering in Medicine and Biology Sponsors: EMB, AEMB Exhibit: Yes Est. Attendees: 400	Denver Hilton Denver, CO	Eli Fromm Drexel University Philadelphia, PA 19104 (215) 895-2217
Oct. 8-10	1979 International Conference on Cybernetics and Society Sponsors: SMC Exhibit: No Est. Attendees: 350	Denver Hilton Hotel Denver, CO	Dr. James D. Palmer Administrator Research & Special Programs Dept. of Transportation 400 7th Street Washington, DC 20590 (202) 426-4461
Oct. 8-11	Electrical/Electronics Insulation Conference Sponsors: EI, NEMA Exhibit: Yes	Sheraton Boston Hynes Auditorium Boston, Mass.	J. D. Deacon General Conference Chairman P.O. Box 4305 East Providence, RI 02914 (401) 434-2340
Oct. 9-11	Electromagnetic Compatibility Conference Sponsors: EMC Exhibit: Yes	Town & Country Hotel San Diego, CA	F. J. Nichols Lectro Magnetics, Inc. 6056 West Jefferson Boulevard Los Angeles, Calif. 90016 (213) 870-9383
Oct. 9-11	Electronic and Aerospace Systems Convention (EASCON) Sponsors: AES, Wash. Section	Sheraton National Hotel Arlington, VA	Herbert D. Benington V. P. and General Mgr. of Metrek Division Mitre Corporation 1820 Dolly Madison Blvd. McLean, VA 22101

HELP BUILD OUR PROFESSIONAL SOCIETY 1979 – GOAL – 8% INCREASE

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Reliability &
Maintainability?*

*Questions About
Reliability of
Electronic Devices?*

TRY RELIABILITY SOCIETY!

Fellow Reliability Society Members,

Please tear off the application for IEEE and Reliability Society membership and give it to an acquaintance who should be a member but who could never find an application.

Note the 50% reduction due to the half-year left in '79.

Thank you in advance.

Thomas L. Fagan
Membership Chairman

IEEE Service Center
Attention: Member Services
445 Hoes Lane
Piscataway, NJ 08854

NEWSLETTER/July '79

- Yes—please renew by membership in the Reliability Society.
- I am presently an IEEE member—enclosed is a check for \$3.50 for the Reliability Society.
- My IEEE membership also has lapsed, enclosed is a check for \$26 to cover IEEE and RS membership—U.S. (\$24.50—Canada).

Name _____

Company _____

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