The French have an expression; you are our "reason for being". The Society forms a professional network that can bring many advantages. All this is to say, I would like to hear from you. Today, I have two specific requests that I am making of you.

First, I'd like to share an experience that I have had teaching a course called "transformational leadership". This is a team-building and empowering course.

One exercise we conduct is to give a team, of say seven people, four balls that are individually labelled. The teams are then time challenged to find the fastest process to circulate the balls past each team member with each team member touching them in sequence. After about 5-10 minutes, the teams develop a process that accomplishes this task fairly rapidly, about four seconds.

Then, I, as facilitator, disclose that a team at HP (fictitious) has accomplished this feat in 0.5 seconds. The teams immediately abandon their process and develop a new one that meets or beats the 0.5 second. They typically develop this new process faster than they did the first. Wow! The importance of a good benchmark.

A lot of us now are struggling to bring about jumps in our product reliability via six sigma programs or others.

1. I would like to hear of some of your success stories that we may all profit thereby. If you have one to share, please send it for publication in our newsletter.

2. I would like to put together a listing of key members by their specialty. This would create a network reference that would be made available to all members. To participate, I request that you send in your interest area (e.g. fibre optic reliability) to our Vice President of Technical Operations, Mr. Joe Guessing, whose address is on the back of the front cover.

In future newsletters, I will let you know of our progress.

Also, by this time, we should all have received a copy of the Computer-Aided Engineering Conference proceedings. Hope you enjoy this bonus publication.

Dr. Samuel J. Keene
President
IEEE Reliability Society

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In getting ready for the first edition as the new editor I thought a lot about the purpose of our newsletter. I think we’ll all agree that it must center around disseminating information about events in the fields of reliability and maintainability. As a result you should see some changes to the newsletter. This involves noticing of new books, bulletin boards, job fairs, editorials, and R&M military handbook status. Dr. Keene expressed his interest in hearing about your successes. You may also have a good lesson learned from a failure as well. Consider sharing your experience with us through the newsletter. I’m interested in hearing what you have to say about the current state of R&M engineering or events and ideas that may be of interest to others. If you have any thoughts on additions or changes to the newsletter, please drop me a note. I’m looking forward to an interesting and rewarding term as your newsletter editor.

Bruce Bream
Editor
IEEE Reliability Society Newsletter

Reliability Society Newsletter Inputs

All RS newsletter inputs should be sent to:
Mr. Bruce Bream
NASA Lewis Research Center
M.S. 501-4
21000 Brookpark Road
Cleveland, OH 44135
Tel: (216) 433-6532 * Fax: (216) 433-5270
Email: sbream@lirm02.lerc.nasa.gov

* Note this is a new phone number

The schedule for submittals is:

- Newsletter Due Date
  - October 25
  - January 25
  - April 25
  - July 25
  - October 25
  - August 5

Chapter Activities

BOSTON CHAPTER
The Boston Section has successfully started its 1991-1992 season on a positive note with an excellent talk on software reliability followed by the start of our Fall Lecture series on "Software Reliability Measurement, Assessment and Modeling". This lecture series is authored by Drs. Michael Elbert and David Heimann. In the next issue of the newsletter I will comment further on the lecture series since it has just started.
Alex Exlentuk spoke at the Hanscom Air Force Base NCO club on Software Reliability Testing. This talk was well represented by the membership and was well received by all.
The Administrative Committee is now filled and we are looking forward to a highly positive and successful year. The ActCom for this year is as follows:
Chairperson: Gary Kushner
Vice-Chairperson: Ruth Evans
Treasurer: Anita Cederholm
Secretary: Mike Johnson
Junior Past Chairman: Don Markson
Senior Past Chairman: Don Simpson
Monthly Programs: Warren Snow
Publicity: Sid Gorman
Arrangements: Bill Rodriguez
Steering Committee Chairman: Mark Snyder
Spring Seminar Chairman: Jim Kalamba
Spring Seminar program: Brian McQuillan
Technical Development Chairman: Gene Bridgers

DALLAS CHAPTER
The Dallas Chapter has a full calendar of meetings planned for this year. A wide variety of topics are planned to meet the needs of the diverse spectrum of local Reliability and Maintainability society members. Topics will include stereo lithography, multi-discipline approach to Systems Engineering, software reliability, physics of failure, integrated diagnostics, and mechanical reliability. Invited speakers from outside the local area are planned to give our members a more national perspective on these topics.
The September meeting initiated our current year of activities and covered a topic of interest to all - Desert Storm. A recently retired Air Force pilot, Barry Wade of Texas Instruments, presented an informative presentation, utilizing video tape and 35mm slides to illustrate certain areas. His entertaining style of delivery added a lot to the meeting.
Of key interest to the Chapter is the desire to get more local members involved in their society and their local chapter. If you are a Reliability or Maintainability engineer in the local area, join us and participate.

CLEVELAND CHAPTER
The Cleveland Chapter had two good meetings during this reporting period:
Our 7th meeting was on Achieving Quality In America. This meeting was from the George Washington University Center Video-conference Seminars. Two experts: Dr. Joseph Juran and Dr. Blanton Godfrey talked about:
- Quality Needs for Global Competitiveness
- Total Quality Management
- Quality Improvements Show Results
This meeting was well received and enjoyed by all.
Our 8th meeting was on Neural Network Applications for the 1990's. This meeting was from the IEEE Learning Channel Video-conference Seminars via satellite. Three experts: Dr. James Anderson, Dr Han Hamstrom and Dr Larry Jackel talked about:
- Present and Future Plans to Build Digital VLSI Circuitry
- Current Applications of Neural Networks
- Current and Future Applications of Neural Networks
Every available seat was filled. Some were only able to get a copy of the notes. All went well.

Cleveland Chapter
Mr. Bruce Bream has been selected to serve as the Editor of the RS Newsletter. Congratulations Bruce! Gary Kushner and Mark Snyder did a fine job. Our thanks to them for all of their help.
Mr. Vince Lalli was nominated and elected as Chairperson for the Cleveland Section.
All-in-all in Cleveland we are having fun serving our members and look forward to expanded activities in the future.

Dennis Hoffman
Dallas Chapter Chairman

DENVER CHAPTER
The Denver Chapter held its 8th Symposium on Software Reliability. This was hosted at Loral in May. There were 70 attendees over the two day conference. Attendees came from all over the United States plus Canada, Scotland and England. A $60 fee was charged for all attendees (except presenters). The Denver Chapter made over $2,000 after expenses. We will use this to enhance our meetings and activities.

LOS ANGELES CHAPTER
At the April meeting, Larry Stern, a Software Project Manager at Hughes Aircraft, spoke on "Software Project Management". Larry is currently chairman of the Los Angeles Computer Society. As we are a joint chapter, Larry has been a great asset to our program. In January he leaves us to fill the IEEE Congressional Fellow position.
In May, Dave Williams of TRW lectured and demonstrated the latest in computer generated music. Laurie Baum of TRW entertained us with his hammered dulcimer while his computer accompanied him.
The June meeting had a presentation by R. Englebardt of Hughes Aircraft where he discussed Design of Experiments/Variability Reduction. He currently teaches these courses at Hughes Aircraft. Seiji Sugihara of Aerospace also spoke on Taguchi Methods. Both of these speakers were on the TQM mini-course agenda.
In June, we offered a mini-course on TQM Process & Product Improvement Discoveries. Topics included:
- TQM Lessons Learned, R. Lockwood (Space Systems Division)
- Variability Reduction, R. Englebardt (Hughes Aircraft)
- Cycle Time Management, A. Doggett (Hughes Aircraft)
- Quality Function Deployment, J. Wahl (Hughes Aircraft)
- Taguchi Methods, S. Sagihara (Hughes Aircraft)
- Statistical Process Control, R. Saver (Hughes Aircraft)
- Technical Risk Assessment, C. Orr (TRW)
- Concurrent Engineering, A. Edwards (Edward Assoc)
- Mysteries of EMC Exposed, A. Rivera (Hughes Aircraft)
All of these presentations were videotaped and are available through our TQM Exchange program.
Upcoming meetings include:
July
Gary Kushner
Boston Reliability Chairperson

Dennis Hoffman
Dallas Chapter Chairman

High Performance Computing
- to watch closely worldwide developments in technology markets and government policies that could affect United States high performance computing . . .
- to develop a comprehensive view of the problems related to privacy and security
- to examine personal communications services (PCS) issues associated with interconnection...
- to examine various telecommunications services and charges...
- to examine comparative positions of communications and information technology industries in the United States vis-avis those of selected foreign countries . . .

Security permitting, he will show actual photos generated.

Bill Zeller of Hughes Aircraft will discuss the survey of the field of brain machines. The purposes and benefits will be discussed.

September
Two speakers from Southern California Edison will discuss Alternate Energy Sources and Low Frequency EM Fields. The first speaker is Ron Luxa and he will primarily discuss wind power energy. The second speaker is Kirby Holt and he will discuss the danger or safety of EM fields. This will be a joint meeting with the LA Chapter of SSI.

Committee on Communications and Information Policy
The CCIP, a technical committee of IEEE-USA, addresses the interfaces between the electrical/electronic/technical community and the political arena at the federal level, predominately in Washington, D.C. By establishing formal position papers or 'white papers' on subjects of interest to the Federal government, the CCIP acts as a technical informed and educator of Congressmen, their staffs and FCC, GAO and OTA personnel.
There are five hardworking subcommittees that investigate, assess and prepare documentation for the entire Committee to review and approve:
- Information Security and Applications
- Telecommunications Network
- to examine personal communications services (PCS) issues associated with interconnection...
- Space and Spectrum
- to review and address FCC docket, notices and other rulemaking proposals dealing with spectrum and orbital allocations and regulations...
- Technological Leadership
- to examine comparative positions of communications and information technology industries in the United States vis-avis those of selected foreign countries . . .

Lorettta Arellano
Los Angeles Chapter Chair

The Reliability Society is taking an active role in the committee discussions and will impact the finalization of any current statements in process when and where Reliability and Maintainability expertise, at a system design, is applicable. We are looking for volunteers who can be called upon to review and assess the CCIP documents before they become finalized in light of Reliability/Maintainability concerns.
If you are interested in participating, send your name, address, business or home phone number and a list of the technical areas you are qualified to address to:
Mr. Joe Gruessing, VP Technical Operations
Reliability Society
Big Westinghouse Electric
PO Box 726, MS 1701
Baltimore, MD 21203

For further details, contact Hank Wolf at (703) 448-3394.
Academic Education Committee Session
1992 Annual Reliability And Maintainability Symposium
January 22-24, 1992 Las Vegas, Nevada

The Academic Education Committee is a standing commit-
tee of our Society and reports directly to our president, Dr.
Samuel Keene. It is part of a long range plan to make education
a major part of the objectives of the Reliability Society.
As a part of the symposium we will be conducting an
education session and would like to invite all participants
to attend. At this session educational material will be presented
in the general area of integrating reliability/maintainability
concepts into engineering education. Faculty and industry
leaders, with experience in this discipline, will make presen-
tations and share their experience with participants.
If you would like to join our panel of presenters, please call
John Hadjilou, Chairman of the Academic Education Com-
mitee of the Reliability Society, at (407) 766-8000 Ext. 7331.

Calling All Speakers

We continuously receive requests for qualified speakers for
Local, Regional, and National Meetings. In response to this, the
Reliability Society is constructing a "Speakers List". If you
would like to be considered for inclusion on this list, or would
like to nominate someone, please contact me for a nomination
or registration form.
Mr. Thomas L. Fagan, ITT Defense
1000 Wilson Blvd., 30th Floor
Arlington, VA 22209
Tel: (703) 247-2988 Fax: (703) 276-9706

MIL-HDBK-217F Revision F

Work is proceeding at Rome Laboratories on Revision F of
MIL-HDBK-217, Reliability Prediction of Electronic Equip-
ment. Draft copies were sent out for review in April 1991 that
resulted in some 300 comments. Rome Labs is reviewing each
comment and writing responses to each. One of the major issues
involves changes to the quality pi factor. Instead of a single
quality factor there will be separate factors for each quality
criterion. This method is described in the paper, Pi Factors
Revisited, from the 1990 RAM Symposium. If everything goes
according to schedule, revision F may be published in the first

Electronic Bulletin Boards

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– Video Tape Exchange Information –
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Society in General – Papers/Articles –
– Programming Utilities – Tutorials –
– Book Reviews, Demos –
CONFERENCE CALENDAR (continued from previous page)

DATE | CONFERENCE & PLACE | CONTACT
--- | --- | ---
May 18-20 | 42nd Electronic Components & Technology Conference, San Diego, CA | Iwona Turlik  
Microelectronics Center of N.C.  
3021 Cornwallis Road  
Research Triangle Park, NC 27709  
Tel: (919) 248-1847  
Fax: (919) 248-1455
Jun 10-12 | European Safety and Reliability 92, Copenhagen, Denmark | Kurt Petersen  
Systems Analysis Dept.  
RIISO National Laboratory  
PO Box 49  
DK-4000 Roskilde, Denmark  
Tel: (45) 42 37 12 12 x3082  
Fax: (45) 46 75 71 01

CALL FOR PAPERS

1992 May 3-6 | Custom Integrated Circuits Conference, Boston, MA | Mrs. Roberta Kaspar  
Technical Program Coordinator  
CICC '92  
1597 Ridge Road West  
Suite 101C  
Yorktown Heights, NY 10598  
Tel: (914) 784-7573
Oct 7-9 | 3rd International Symposium on Software Reliability Engineering, Research Triangle Park, NC | John C. Munson  
Division of Computer Science  
University of West Florida  
Pensacola, FL 32514  
Tel: (904) 474-2989  
jmunson@dc119.dconsun.uwf.edu

Dr. Stephen S. Lavengood  
IBM T.J. Watson Research Ctr.  
P.O. Box 704  
Yorktown Heights, NY 10598  
Tel: (914) 784-7573
Europe & Others:  
Prof. Giuseppe Iazeolla  
University of Rome II  
Electronic Engineering Dept.  
Viale della Ricerca Scientifica  
1-00173 - Roma - Italy  
Tel: 39-6-79794486

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- **TECHNOLOGY**
  - CAD/CAM/CAT/CALS  
  - Design to Life-Cycle Cost  
  - Modeling & Simulation Methods  
  - Software Tools: R&M and Safety  
  - R&M Test & Demonstration  
  - Reliability Growth  
  - Screening and Failure Analysis  
  - FMEA and PHA  
  - Built-In Test & Testability  
  - Worst-Case Analysis and Prediction  
  - Fault Trees & Diagraphing  
  - Techniques  
  - Repair/Maintenance  
  - Methodologies  
  - R&M Cost-Benefit Analyses  
  - Software Safety and R&M  
  - Environmental Testing  
  - Sneak Circuit Analysis

- **MANAGEMENT**
  - CAD/CAM/CAT/CALS  
  - Design to Life-Cycle Cost  
  - System Effectiveness  
  - R&M Contracting Management  
  - R&M Requirements  
  - Trend Analysis and Risk  
  - Management  
  - Database Management  
  - R&M Cost-Benefit Tradeoffs  
  - Testing Effectiveness  
  - Warranties/Guarantees  
  - Logistics Support  
  - Multinational & International  
  - Programs  
  - Reliability-Growth Management  
  - Product-Assurance Management  
  - Safety Management  
  - Training and Education

- **INDUSTRY APPLICATIONS AND LESSONS LEARNED**
  - Aerospace & Defense  
  - Electric Power & Other Utilities  
  - Oil & Other Resource Industries  
  - Mechanical/Equipment  
  - Transportation Systems  
  - Systems  
  - Microelectronics  
  - Computer Hardware & Peripherals  
  - Software and Smartware  
  - Robotics and Artificial Intelligence  
  - Consumer Products  
  - Medical and Biotechnology  
  - Communication Systems  
  - Office Automation & Database  
  - Systems  
  - Electrical & Electronic Systems  
  - Telecomputing and Networks  
  - Chemical and Agrichemical  
  - Systems

IEEE VIDEOCONFERENCE

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Contact:
Judy Brady, IEEE Marketing, 445 Hoes Lane, Box 1331, Piscataway, NJ 08855-1331  
Tel: (908) 562-3991, Fax: (908) 981-8062

IEEE VIDEOCONFERENCES

SEMINARS VIA SATELLITE

The P.K. McElroy Award
The P.K. McElroy Award recognizes the best combination of the technical paper and its presentation. All submitted papers are graded by the Program Committee. The top contenders are selected and their presentations at the Symposium are monitored by a group of past General Chairman. The author(s) of the winning paper is recognized at the next Symposium and receives a plaque, a $1000 honorarium, and grants registration.

RAMS is a nonprofit symposium sponsored by the following Societies:
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For contact information see Conference Calendar.

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JOB FAIRS

Job fairs and job search seminars are growing nationwide in an attempt to help unemployed members. Conducted by the Lendman Group, a national operator of technical job fairs, the events are produced under a contractual agreement with IEEE. IEEE-USA's Employment Assistance Committee oversees the job fairs and seminars on the national level.

Using its outplacement division personnel and materials, The Lendman Group provides a one-day job search seminar — a workshop on how to find employment — for IEEE members, in exchange for IEEE's co-sponsoring the job fairs. The seminars are usually scheduled in advance of the job fairs so that members have an opportunity to use their newly acquired job-seeking skills.

Job fairs and job search seminars have been scheduled through the reminder of 1991. For more information about planning these events, contact William R. Anderson at the IEEE-USA Office in Washington, D.C. at (202) 785-0017. For information on job fairs and seminars contact the IEEE Career Fair Coordinator at (800) 562-2820; in Virginia, call (800) 533-1827.

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