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# Reliability Society Newsletter

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**Editors: Gary Kushner and Mark Snyder  
Vol. 30, No. 3, July 1984**

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## Editors' Message

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This issue of the Newsletter marks the first one under the associate editorship of Gary Kushner and Mark Snyder. As our first official message to the membership we would like to acknowledge the fine effort by Susan Eames as editor and extend our sincere thanks for a job well done. The next order of business is to introduce ourselves.

Gary Kushner is a Senior Product Assurance Engineer with Digital Equipment Corporation's Microcomputer Products Group in Hudson, MA. As such, he is responsible for the reliability analysis and qualification testing of the offerings of that group. Previously, he was a Reliability/Maintainability Engineer with GTE Sylvania. Gary is currently chairman of the Central New England Chapter of the IEEE Reliability Group and has been very active in the Boston area activities. He is an alumnus of the University of Massachusetts, Amherst.

Mark Snyder is Operations Quality Manager for the Western and Central States Management Center of Digital Equipment Corporation. One of many responsibilities in that role is addressing the customers' perception of product reliability and maintainability for Digital. Prior positions include Reliability Program Manager for the PRO350 per-

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We are highly enthusiastic about this opportunity to edit the Newsletter and recognize our commitment to the Professional Reliability Community. We look forward to a fruitful and interactive relationship with the membership of the society.

Best Regards,  
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For October Newsletter:	by July 9
For January Newsletter:	by October 9
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## Central New England Council

The newly elected Central New England Council's officers Secretary:  
for the coming year 1984-1985 are as follows:

John Chipchak  
HQ ESD/OCBU  
Hanscom AFB, MA 01731

Chairman: Gary Kushner  
499 Brisham St.  
Marlboro, MA 01752

Vice-Chairman: Sid Gorman  
Raytheon Corp.  
EDL-N9  
528 Boston Post Rd.  
Sudbury, MA 01776

Treasurer: Gene Bridgers  
Northrop PPD  
100 Morse St.  
Norwood, MA 02062

The Central New England Council held its 22nd annual All-day Seminar on April 26, 1984. The Section was honored to have Dr. T. L. Regulinski deliver the keynote address. This was followed by a series of technical papers including talks on such subjects as R/M in Shipbuilding, Centralized Fault Isolation System, Worst Case Analysis of Microwave Circuits, and Computer Aided Stress Analysis of Digital Circuits.

In addition to the papers, demonstrations were held of various software packages/applications available in the R/M field. This went over very well and there are plans to add this to our annual seminars in the future.

Gary Kushner  
Chairman

## Letters of Interest

#### To the Editor:

You would be glad to know that I have been conferred the first Dr. Lal C. Verman Award (1983) by the Institution of Electronics and Telecommunication Engineers, New Delhi. The award consists of a medal for the undersigned and a plaque for my Institute. This award has been made in recognition of the distinguished contributions in the field of Standardization/Quality Control/Reliability/Precision Measurement in Electronics and Telecommunication field in the last 10 years.

The above information may please be suitably placed in your next available bulletin of the Society for which I shall be grateful to you.

Yours sincerely,

(K. B. Misra) Head,  
Reliability Engineering Centre  
Indian Institute of Technology  
Kharagpur, India

#### To: 1984 Society/Council Presidents

#### Re: 1984 Transnational Relations Exchange Programs

This is to advise you that the IEEE Transnational Relations Committee plans to issue a call for lecturers for an IEEE Distinguished Lecture Tour of Region 9. The following announcement, which will appear in Institute publications, provides details of how to apply for the tour. You may wish to forward this announcement to your Society Newsletter Editor for possible publication. Please Note: the deadline for applications is July 15, 1984.

We would appreciate your considering expressions of interest from your members and forwarding your recommendations to the IEEE Transnational Relations Committee

On behalf of the committee, allow me to thank you for your assistance. I look forward to contacting you in the future with details of other TRC projects.

Sincerely,

M. E. Van Valkenburg  
Chairman

### Call for Lecturers

This is a call for lecturers to apply for a 1984 IEEE Distinguished Lecture Tour of Region 9. This approximately two week tour is scheduled for the fourth quarter of this, our Centennial, year; the proposed itinerary includes visits to some or all of the following countries: Brazil, Chile, Colombia, Mexico, Peru and Venezuela. Participants will interact with IEEE Section officers and members throughout South America. Funding is the responsibility of the individual lecturer.

IEEE members who wish to be considered as potential lecturers should send letters indicating their interest in this tour, accompanied by their resume and a summary (limited to one typewritten page) of their proposed technical lecture, to their respective Society/Council president. A copy should also be sent to Dr. M. E. Van Valkenburg, Chairman, IEEE Transnational Relations Committee, c/o Ms. Barbara Ettinger, TRC Administrator, IEEE, 345 East 47th Street, New York, NY 10017.

The deadline for submitting applications is July 15, 1984.

## Call for Papers—Transactions

The IEEE Transactions on Reliability has a continuing need for practical papers:  
Examples are:

- \* Case histories
- \* Reliability techniques which were found to be useful on a job, and those which were not useful or were too expensive.
- \* How you set realistic R&M requirements for a system or equipment.
- \* What kinds of reliability testing were actually cost-effective.
- \* Use of reliability data from the files instead of from special reliability tests. Comparison of field data with reliability tests.
- \* Comments on the worth of standards such as the many international or US military standards on reliability.

- \* Ideas, from experience, on the major obstacles to setting and achieving worthwhile reliability requirements in commercial, military, or other fields.
- \* Where to find information. For example a list of trade and professional journals of value to electronics reliability and quality control practitioners.
- \* Information summaries. For example, annotated lists of computer programs for analyzing electronic circuits or for generating fault trees—tell what the programs do, how big a computer they need, and where they are available.

Send submissions or ideas to Ralph A. Evans, Editor, *IEEE Transactions on Reliability*, 804 Vickers Ave., Durham, NC 27701.

## Notes—Membership—Chapter Activities

- 18) North Jersey and Connecticut IEEE Section chairmen have requested additional time for reactivation. It is recommended that time be extended.
- 19) It is recommended that the Twin Cities Chapter be deactivated.
- 20) No word has been received from Japan or India. Another attempt to contact them will be made. Japan has a chapter and India wants to form a chapter.
- 21) The New York Chapter is becoming active and has two meetings planned for 1984.
- 22) A new chapter is the Tri-Cities (Tennessee) chapter.
- \*M 23) Mr. Bernard Bang moved that the Twin Cities Chapter of the IEEE Reliability Society be deactivated. The motion was seconded by Dr. Thaddeus Regulinski. The motion passed unanimously.
- 24) Chapter Activities Report - See Attachment E

### Notes—Membership—Home Study Course

- 25) Chapter I has been cleared through North-Holland Publishing
- 26) Home Study Course Report—See Attachment F

### Notes—Technical Operations

- 27) Eleven (11) committees are active. The objectives for Technical Operations are contained in Attachment G.
- 28) The Human Performance Reliability Chapter is progressing.
- 29) In the Health Care area, new documents have been issued and an article for the Reliability Newsletter has been identified.
- 30) The Mechanical Reliability effort is centering around the May 1-3, 1984 39th MFPG meeting at NBS.

- 31) The Nuclear area is involved on risk evaluation of radioactive waste management techniques and on failure analysis and procedure guides. The working group on Reliability and safety methods in non-nuclear industries is active.
- 32) The Standards and Definitions Committee has completed a review of Revision 3 to the Reliability Standardization Document Program Plan.
- 33) The systems engineering effort will focus on technical participation in a 1984 September Symposium and in the issuance of MIL-STD-2164 (EC).
- \*A 34) Dr. O. D. Trapp has resigned his position as Parts Screening Chairman. Recommendations are welcomed for a replacement.
- 35) Contact has been established with the Quality Assurance Management Committee of the Communications Society. Recommendation is made for a liaison member from the Reliability Society and for the establishment of a Technical Operations Committee.

- 36) Items 27 - 35 are detailed in the Technical Operations Report in Attachment G.
- 37) The Advanced Devices and Techniques Activities for 1984 are outlined in Attachment H. Mr. Anthony Coppola is thanked for his assistance in the preparation of the 1983 report. The 1984 emphasis will be placed on device techniques, reliability software technology, reliability prediction techniques, reliability demonstrations methodology, design reliability and reliability management.
- 38) The software reliability activity discussed MIL-STD-721 and the Software Reliability Metrics Standard, P982. The details are contained in Appendix I. When a firm draft of P982 is available, it will be distributed to AdCom members.

### Notes—President's Action Items

- \*A 39) A Reliability Society Representative has been requested for the Energy Committee.
- 40) A PACE Representative has been requested. Mr. Irv Doshay agreed to fill this position.

March 29, 1984

## Technical Operations Vice President's Report

At the present time, there are eleven committees which are actively working in their technical areas. In addition, action has been initiated towards active participation in the Quality Management area. A new chairman is required for the Parts Screening Committee.

The objectives for Technical Operations for 1984 include:

1. Ensure that all committees are actively pursuing objectives and activities for the coming year.
2. Establish new committee chairmen where required.
3. Complete or modify committee charters where required.
4. Submit articles on committee operations, accomplishments, and activities to the Newsletter.
5. Establish new committees in other technical areas where needs are identified.

The following is a summary of committee activities and objectives at the present time:

### 1. Human Performance Reliability—Arthur Siegel, Chairman

An outline of a chapter on human performance reliability for the revised McGraw-Hill *Reliability Handbook* was written and chapter preparation is now taking place. The chapter is being co-authored by A. Siegel and K. LaSala and is titled "Design for People." It covers conceptual and design human performance reliability issues in planning and implementing a product's design and introduction.

No other activity took place over the period. Work during the next interval will focus on developing the above described chapter.

### 2. Health Care—Vernon Gardner, Chairman

1. The work that was completed previously is now in the hands of the IEEE for approval by TAB and USAB.
2. The new issues are:

- a. Seminar series on Clinical Engineering Use and Effectiveness
  - b. Role that engineering should play in the Food and Drug Administration medical device approval process.
  - c. Federal funding of clinical engineering education.
  - d. Role of IEEE/Health Care Policy Committee in government analysis of health care.
3. Two of the documents under review are:
    - a. A statement dated Feb. 24, 1984 by Franklin A. Curtis, Associate Director, Human Resources Division, before the House Committee on Energy and Commerce Subcommittee on Health and the Environment on the Federal Regulation of Medical Devices.
    - b. A proposal by the Stevens Institute of Technology, Hoboken, NJ, for an Information Technology Workshop.
  4. By letter of March 1, 1984 comments were received from Dr. A. Alan Andersen, Acting Deputy Director, Office of Standards and Regulations, National Center for Devices and Radiological Health, concerning two of our proposed position papers: Food and Drug Administration Medical Device Approval Process and Medical Device Design Process.
  5. It has been suggested that Dr. W. B. Jarzembki, Health Care Policy Committee Chairman, submit an article, "What's new in health care policy," corresponding to the one that appeared in the February 24, 1984 issue of *IMPACT*, for publication in the *Reliability Society Newsletter*.
  6. A meeting of the Health Care Policy Committee was held in Chicago on March 17, 1984. This may be the last meeting in 1984 due to reduced funding.

### 3. Mechanical Reliability—Henry Hegner, Chairman

The primary objective of the IEEE Mechanical Reliability Committee for 1984 is to aid communications between those involved with the reduction of mechanical failures through Mechanisms of Failure; Detection, Diagnosis and Prognosis (DD&P); Materials Durability Evaluation; and Machinery Durability. The symposiums held by the Mechanical Failures Prevention Group (MFPG) during 1983 made progress toward this objective by means of symposiums in the areas of materials and machinery durability. Additional progress should be made during 1984 by means of a symposium in the area of mechanisms of failure as summarized below. Also, the DD&P Committee of MFPG will be meeting on March 27, 1984 to initiate plans for a symposium during Spring 1985 in the area of DD&P of machinery failures.

The Spring 1984 39th MFPG meeting addressed "Failure Mechanisms in High Performance Materials" and was held at the National Bureau of Standards (NBS) on May 1-3, 1984. The emphasis of this meeting was the identification and interpretation of degradation and failure modes in high performance materials. The technical program for the 39th Meeting of the MFPG is complete.

The response to the Call for Papers was timely with strong participation from both the industrial and academic sectors as well as from government laboratories. The symposium had an international flavor with contributed papers from Canada, Israel, France and Australia.

Based on the submitted abstracts, the authors appear to have clearly focused on the conference theme of identifying and interpreting degradation and failure modes in high performance materials. Technical sessions were centered around high technology metal alloys, structural ceramics, metal matrix composites, and organic composites.

In addition to the technical sessions schedules, conference attendees had an opportunity to visit two of the newest facilities at NBS: Metals Processing Laboratory including Rapid Solidification Facility, and Automated Manufacturing Research Facility (Robotics). Details of these activities were provided in the symposium brochure available in March.

For further information contact:

J. G. Early, Program Chairman  
A153 Materials Building  
National Bureau of Standards  
Washington, DC 20234  
(301) 921-2976

or

T. R. Shives, Executive Secretary  
A113 Materials Building  
National Bureau of Standards  
Washington, DC 20234  
(301) 921-2934

### 4. Nuclear Systems Reliability and Safety—Jerry Fussell, Chairman

The Working Group on Risk Evaluation of Radioactive Waste Management serves as a "third-party" peer review

of regulations and studies involving risk evaluations of radioactive waste management techniques. The group is actively critiquing regulations such as 10 CFR 60 (NRC) and 40 CFR 191 (EPA) in an effort to provide coordination and commonality in assumptions and methods in these regulations. Dr. Tom Smith of EG&G Idaho chairs this Working Group.

Project 831, Guide for Qualitative Common Cause Failure Analysis of Engineered Systems, is being re-evaluated by the Working Group on Qualitative Common Cause Failure Analysis. Recent advances in common cause failure analysis methods may result in the guide being "out-of-date," thus making publication of the current draft inappropriate. Mr. D. J. Campbell of JFB Associates chairs this Working Group.

The Working Group on PRA Procedures Guide is performing an independent review and evaluation of the PRA Procedures Guide being developed by the ANS, IEEE and NRC (NUREG/CR-2300). Dr. W. E. Vesely of Battelle Laboratories chairs this Working Group.

The Working Group on Reliability and Safety Methods in Non-nuclear Industries in reviewing and evaluating reliability and safety methodologies currently in use in non-nuclear industries, with the objective of identifying those methods that are applicable and useful in nuclear industry applications. Dr. Armand Lakner of the NRC chairs this Working Group.

New members of the committee are David Campbell and James Rooney of JFB Associates, Inc. It should be noted that JFB Associates, Inc. has moved to new offices at 1000 Technology Park Center, Knoxville, Tennessee. A list of committee members follows.

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quality assurance. Please give him your support by volunteering to organize, chair or participate in session activities. A copy of the letter from Bill describing the ICC '85 program follows. I've also included the "call for papers" for ICC '85.

Paul Plsek (201-949-1966) of AT&T-Bell Labs has agreed to serve as chairman of the combined Publicity and Newsletter Subcommittees. These subcommittees will be vital to our organizational efforts. If you would like to serve on the combined subcommittees or you have ideas concerning the newsletter please contact Paul.

Dick Jacobs has been appointed liaison to our committee from the American Society for Quality Control. Dick has worked in the quality and reliability assurance fields for many years. He is a renowned expert on liability matters concerning reliability issues. I welcome Dick to our committee and look for a strong association with ASQC in our future work.

The final bit of status information that I have for you is that the Membership chairman, Bob Holkup, ITT-Telecom, has started a drive to increase membership and participation in the committee. He will be getting in touch with you to solicit your help in building the committee structure. Please support his efforts. By participating in the committee work you will be able to help shape the communications industry during the early post-divestiture period. You may call Bob on (919) 829-3161.

The committee is planning to hold a meeting at the ICC '84 conference in Amsterdam. Plan to attend if you are going to be at the conference.

As you can see, the Committee has been busy. Thanks to Sandy Liebesman's hard work and your strong support we have come a long way in three short months, but we still have a lot to do before we can become an effective force in the Communications Society. We look for continued support from all of you.

**Roshan L. Chaddha**  
Chairman

Initial Proposal for  
ICC-85 Sessions Sponsored  
by the Quality Assurance  
Management Committee

You are invited to help formulate a proposal for ICC-85 technical sessions sponsored by the Quality Assurance Management Committee (QAMC) of the IEEE Communications Society. We need to identify session organizers, chairpersons and some specific commitments for papers in time to make a well documented proposal at a preliminary program development meeting to be held in April prior to the ICC-85 meetings in Amsterdam. Final plans on session allocations were made at the Amsterdam conference during May 14-17, 1984.

Your help is needed now. Our objective is to work with members willing to serve as session organizers to get the

QAMC program organized early with specific indications of support. We are hopeful that your response to this invitation will enable us to obtain a consensus that communications quality issues warrant strong ICC-85 coverage such as four sessions and perhaps one tutorial. The ICC-85 call for papers includes the Quality Assurance Management area. Contacts by the QAMC membership committee and by individual QAMC members will be used to provide additional inputs for ICC-85 QAMC program development.

An initial proposal for possible session themes and paper topics was developed by Bill Comella and Sandy Liebsman on February 6, 1984. This proposal was reviewed by the QAMC officers and is now circulated to members to obtain specific commitments for papers. Authors should consider two major factors during the development of their papers. First, they should try to highlight supplier-user relationships which played a major role in the project development. And the committee feels that papers containing examples will greatly strengthen our program.

Please contact me concerning your support of the ICC-85 program. We need session organizers, session chairpersons and session participants. Your response in the next few weeks is vital.

**W. K. Comella**  
Quality Assurance Management Committee  
Representative ICC-85

### QAMC Sponsored Sessions for ICC-85

The QAMC ICC-85 sessions can be centered about a theme of awareness and management of quality throughout three major system phases:

- Product Definition
- Product Realization—(Design and Manufacture)
- Product Support—(Deployment and Field Performance)

And, these three areas can be complemented by an examination of the needs for quality education and training as part of the curricula of engineering schools in the universities and continuing education for industry professionals. With this four-part theme to tie the sessions together a number of topics are possible:

- (1) Product requirements and specifications
  - a. Design quality and reliability
- (2) Manufacturing
  - a. Control of components
  - b. Process design
  - c. Process control
  - d. Testing
  - e. Auditing
  - f. Surveillance
- (3) Product support
  - a. Hardware performance
  - b. Software performance



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#### 5. Standards and Definitions—Gus Constantinides, Chairman

The primary objective for this year is to continue to review and critique proposed reliability and maintainability standards, specifications, handbooks, and other documents.

Formal reviews will be made through established panels of interested Society members, comments will be summarized and disseminated, and Society members will be notified of new document drafts and proposed revisions.

The latest activity was completion of a review of Revision 3 to the Reliability Standardization Document Program Plan. Several new documents are expected in the near future.

#### 6. Systems Screening—Bill Wallace, Chairman

the primary objective for this year is to support the effort on collection of environmental screening data and to further the issuance of standard documents on equipment screening. Planned activities include:

1. Participation on the task force formed by IES on data collection which will conduct a symposium in September, 1984.

2. Issuance of MIL-STD-2164 (EC) on production acceptance testing of system hardware which is based on document P94-2.

#### 7. Parts Screening

Bud Trapp has resigned as chairman of this committee and a replacement is being sought. Recommendations are welcomed.

#### 8. Advanced Devices and Techniques: Phil Eisenberg, Chairman

Phil Eisenberg is planning to attend the ADCOM meeting and will present his report.

#### 9. Quality Assurance Management

Contact has been established with the Quality Assurance Management Committee of the Communications Society. A copy of their status report follow. It is recommended that we formally appoint a liaison member from the Reliability Society.

#### Quality Assurance Management Committee—Status Report

#### March 1, 1984

The Quality Assurance Management Committee of the IEEE Communications Society has made great strides in the past three months. The Program Subcommittee met on January 5 and organized four sessions and a tutorial for GLOBECOM '84. We appear to have met our commitments concerning the number of papers needed for that conference. In addition, we have added a program chairman for ICC '85 and a subcommittee chairman for the Publicity/Newsletter subcommittees.

Bob Kessler of Bell Canada (514-870-7683), the GLOBECOM '84 Program Chairman, has kept the program committee informed of the status of that program. Please continue to give him your support. We need to make our contribution to the program top notch because it is our first effort in COMSOC. Bob will continue to remind you of commitments and schedules.

Bill Comella (201-949-1743) was appointed Chairman of the ICC '85 Program subcommittee. Bill is a member of AT&T-Bell Labs. He brings to the committee many years of experience in high technology communications systems

- c. Documentation
  - d. Training
  - e. Feedback
- (4) Quality Assurance Technology
    - a. Software Quality assurance
    - b. Component quality assurance
    - c. Repair failure analysis
    - d. Design standards
  - (5) Network Quality Assurance
    - a. Allocation of Q/R to elements
    - b. Performance objectives and measurement
    - c. Private network performance

- (6) Education and Training
  - a. QA Technology disciplines
  - b. QA management
  - c. Quality Program Analysis
  - d. Reliability program analysis
- (7) Contracts
  - a. Quality and Reliability specification
  - b. Contract compliance
  - c. Corrective action

#### 10. Software Reliability—Irv Doshay, Chairman

Irv Doshay is planning to attend the ADCOM meeting and will present his report.

## Conference and Course Calendar

DATE	CONFERENCE OR COURSE	LOCATION	MORE INFORMATION
October 16-18	1984 International Symposium on Electromagnetic Compatibility	Hotel Pacific, Tokyo	EMC '84 Tokyo C/O Prof. Takagi 0222-22-1800 X4266
October 21-24	1984 Conference on Electrical Insulation and Dielectric Phenomena	Wilmington Hilton Clayton, DE	Steve Boggs 416-231-4111 X6735
October 22-24	1984 International Symposium on Noise and Clutter Rejection in Radars and Imaging Sensors	Tokyo, Japan	Prof. Hisano Ogura (075)791-3211 X620
November 5-7	Autotestcon '84	Washington, DC	J. A. Houston (301) 628-3620
November 27-30	13th Annual Conference on Magnetism and Magnetic Materials	Town and Country Hotel San Diego, CA	Dr. John T. Scott American Inst. of Physics 335 East 45th St. New York, NY 10017
December 17-20	National Conference on Quality and Reliability	Bombay, India	Prof. M. N. Gopalan Indian Inst. of Tech. Bombay, India
<b>1985</b>			
June 23-26	International Conference on Communications	Palmer House, Chicago	Elmer Schererman (312) 681-7341
August 26-30	Relectronic '85	Budapest, Hungary	Scientific Society for Telecommunication Organizing Committee of Relectronic '85 H-1372 Budapest P.O. Box 451 Hungary 531-027
September 15	call for papers 500 word abstract		
October 8-10	Melecon '85	Madrid, Spain	Prof. A. Luque Instituto de Energia Solar E.T.S.I. Telecomun. upm Ciudad-Universitaria Madrid-3, Spain

## IEEE News Release

### IEEE Press Publishes "Engineers & Electrons"

#### An Informal, Illustrated History of Electrical Engineering

The publication of *Engineers & Electrons* has been announced by the IEEE Press, book publishing arm of the Institute of Electrical and Electronics Engineers, Inc. (IEEE). Authors of the book are John D. Ryder and Donald G. Fink.

Containing 204 photographs, tables and charts, *Engineers & Electrons* tells the often exciting story of how electrical engineering began modestly, then grew impressively into the technologies that today pervade all aspects of daily life. The book's time span is two centuries, although the authors focus their attention on the past 100 years. Emphasis is on developments in the United States.

*Engineers & Electrons* is as much a revelation of the human side of engineering as it is a description of the technical accomplishments of the profession. Written in a popularly oriented, informal style, the book is rich in descriptions of genius-innovators—Faraday, Edison, Steinmetz, Tesla, Marconi, Babbage, Armstrong, plus many others, past and present. All aspects of electrical engineering are covered, including power, communications, entertainment, electronics and computers.

Nontechnical matters are also treated, such as professionalism, engineering education and the history of the IEEE and its two founding societies—the American Institute of Electrical Engineers (AIEE) and the Institute of Radio Engineers (IRE)—which joined forces in 1963. Now the world's largest professional technical society, the IEEE is celebrating its Centennial anniversary throughout 1984.

In the Preface, the authors express their hope that *Engineers and Electrons* "may satisfy the desires of the professional for concise information and may thrill engineering students when they learn something about 'double E' beyond that gained in their everyday course work." In addition, any person concerned with the basic advances in science and engineering should find this book both informative and interesting.

**Chapter titles:** In the Beginning; Discovery and Invention; From Electricians to Engineers; Maxwell's Prophecy Fulfilled; The Electron Sings a Golden Tune; The Electron Shows Its Muscle; Electrons and Holes—Much from Little; Electronic in War and Peace; All the World Becomes a Stage; Computers and the Information Revolution; Young Engineers and their Elders; AIEE + IRE = IEEE.

Author John D. Ryder is a former Dean of the College of Engineering and Professor of Electrical Engineering at Michigan State University. Holder of 24 patents and author

of seven textbooks in electronics and circuit theory, Dr. Ryder is a former President of the IRE and first Editor of the IEEE. A Fellow of the IEEE, he is currently chairman of the Task Force for the 1984 Centennial program.

Author Donald G. Fink is a former Director of Philco-Ford Scientific Laboratories; an Expert Consultant, Office of the Secretary of War; and Editor of *Electronics* magazine. Holder of two patents, Mr. Fink has written or edited 13 books including McGraw-Hill's *Electronics Engineers' Handbook*. He is a former President of the IRE, the first General Manager of the IEEE, and carries the title of IEEE Director Emeritus for life. A Fellow of the IEEE, Mr. Fink is currently involved in a variety of engineering consulting and editorial assignments.

*Engineers & Electrons* is clothbound and priced at \$29.95. IEEE members can purchase the book for \$17.95. This 251-page book may be ordered post-paid (Order No. PC01669) from the IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854.

### IEEE Mourns Loss of Dr. Donald D. King, 1984 President-Elect

#### Dr. King, President of Philips Laboratories, Succumbs at Age 64

The passing of Dr. Donald D. King, 1984 President-Elect of the Institute of Electrical and Electronics Engineers, Inc. (IEEE), represents a grievous loss to the Institute and to the entire engineering profession, according to an announcement issued today by the IEEE. Dr. King, President of Philips Laboratories Division of North American Philips Corporation, died March 13 following a brief illness. He was 64 years old and lived in Chappaqua, New York.

"We are deeply shocked and saddened by the unexpected and untimely passing of Dr. King," said Dr. Richard J. Gowen, President of IEEE. "During his almost 40 years of service to the Institute, Don King gave of himself and his talents unsparingly. His dedication to and support for the Institute, its members and our profession could well serve as a model for each of us. His was a concern for the whole man, for the whole engineer—a concern which he pursued throughout his career and which in recent years was expressed in part through his efforts to encourage retraining and continuing education programs for engineers as one means to guard against obsolescence.

"Dr King would have assumed the office of President of the IEEE on January 1, 1985," Dr. Gowen added. "Ours is a grievous loss. Leaders of Dr. King's character, dedication, talent and perceptiveness come along only once in a great while. In his few short weeks as President-Elect of the IEEE, he had already made an indelible impression on those who were privileged to work with him. On behalf of his

many friends and colleagues, we offer our deepest sympathy to his family at their loss; we also thank them for having shared Don with us. Our lives, and our profession, are the richer for it."

Dr. King was a Fellow of the IEEE and had been a member since 1946. Among his many activities, he served on the Awards, Publications and Technical Activities Boards and on a number of major committees including those concerned with Individual Benefits and Services, Pensions, Fellow, Group/Society Awards, and Nominations and Appointments. Dr. King was a member of the Antennas and Propagation Society and the Microwave Theory and Techniques Society (MMT), and served on their Administrative Committees. He served as Vice Chairman and then as Chairman of the MTT Administrative Committee in 1963 and 1964, respectively, and was an Honorary Life Member of the Committee. He also edited the MTT Transactions from 1959 through 1962.

Prior to joining Philips Laboratories in 1967, Dr. King was Director of Electronics Research Laboratory, Aerospace Corporation. Previously, he was responsible for organizing the Research Division of Electronic Communications, Inc. in Timonium, Maryland, where he managed a series of research programs. Dr. King received his A.B. and Ph.D. degrees (physics, 1946) from Harvard University where he subsequently held a number of research and teaching positions, including Assistant Professor of Applied Physics in 1948. Prior to joining Electronic Communications, he taught at Johns Hopkins University where he also became Director of the Radiation Laboratory.

### Dr. Robert G. Kahrman, Jr. Named Satellite and Seminar Continuing Education Manager at IEEE

Dr. Robert G. Kahrman, Jr. has been named Manager of Satellite and Seminar Continuing Education at The Institute of Electrical and Electronics Engineers, Inc. (IEEE).

Formerly Dean, University College, Seton Hall University, South Orange, NJ, Dr. Kahrman, will manage satellite and seminar continuing education activities of IEEE Educational Services in Piscataway, NJ, reporting to John F. Wilhelm, Staff Director, Educational Services, in New York. The IEEE Educational Activities Board oversees the educational programs of the Institute.

Dr. Kahrman's responsibilities include work on IEEE video conferences such as the June 12, 1984, satellite course on "Personal Computer Software—An Aid to Improved Professional Productivity." In addition, he works on packaged courses offered in conjunction with local IEEE entities as well as private companies covering various aspects of the electrical, electronics, and computer engineering fields.

As Dean of University College at Seton Hall, Dr. Kahrman directed faculty and staff as well as administered curriculum and budgetary activities of the College in connection with several degree programs, new programs, and courses. Formerly, he was Director of Continuing Education and Career Programs at Somerset County College in Somerville, NJ. Prior to joining Somerset, he was Assistant Director, Center for Occupational Education at Jersey City State College, where he initiated the first degree programs in Fire Science in the State of New Jersey. Dr. Kahrman previously served as Assistant Professor in the Department of Education, also at Jersey City State College.

From 1979-82, Dr. Kahrman was Chairman of the National Committee on Private and Independent Colleges of the Association for Continuing Higher Education. In addition to publishing several articles in the field of continuing education, he has just completed a major study with the New Jersey State Police on training women for police work. Dr. Kahrman, his wife, and two children reside in North Brunswick, NJ.

The IEEE is the world's largest technical professional society with some 250,000 members in more than 120 countries. The Institute is celebrating its Centennial Year, recognizing 100 years of progress in electrotechnology.

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## Faculty Position

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