

# RISK

## *newsletter*

*Published by the SOCIETY for RISK ANALYSIS*

Vol. 2, No. 2

September, 1982

### PRESIDENT WHIPPLE, OTHERS ASSUME 1982-83 OFFICES AT SRA's SECOND ANNUAL MEETING

Chris G. Whipple of Electric Power Research Institute, Palo Alto, California, became the second president of the Society for Risk Analysis at its Second Annual Meeting held on June 17 at the Hyatt Regency Hotel, Arlington, Virginia. He replaces retiring president Robert B. Cumming of Oak Ridge National Laboratory, who, in addition to being the society's first president, served as interim president during SRA's organizing stage.

The new president is Technical Manager of EPRI's Energy Study Center and is currently engaged in the study of energy risks. He received a B.S. in engineering from Purdue University in 1970 and a Ph.D. in engineering from the California Institute of Technology in 1974, joining EPRI soon thereafter. Among his many "risk-related" activities, he served as co-director of the NATO Advance Study Institute on Technological Risk Assessment in Sicily during the summer of 1981. During the last four years he also has taught a course for college teachers on risk/benefit analysis under the auspices of the National Science Foundation and the American Association for the Advancement of Science. He is married to the former Fran Machtinger, and they have two children, Matthew, 7, and Allison, 6.



Chris Whipple

#### Slovic is President-Elect

Having just completed a one-year term on the SRA Council, Paul Slovic, a research associate with Decision Research, Eugene, Oregon, is the new president-elect of SRA. He received his B.A. in psychology from Stanford University in 1959 and his M.A. and Ph.D. from the University of Michigan, the latter in 1964. He specializes in cognition and decision making, particularly with respect to how people perceive risks. He has authored numerous articles, serves on the editorial board of several journals, and is a consultant to many organizations. He and his wife Roz have four children.

#### Solomon, Uppuluri Serve Second Year

Kenneth A. Solomon, senior engineer in the Engineering Applied Science Department of the Rand Corporation, Santa Monica, California, will be serving his second year as secretary of the society, and Ram Uppuluri, a mathematical statistician and senior (Cont. on p. 3)

## A NOTE FROM THE PRESIDENT

*As the society moves into a new year, all the trends are good. Membership interest and involvement are strong, as has been indicated by the good attendance at the LP/HC Workshop, by the number and quality of papers submitted to the SRA journal, and by the interest shown in establishing local chapters, particularly by groups in the Washington, D.C., and Eastern Tennessee areas.*

*As Ram Uppuluri reports elsewhere in this newsletter, our finances appear to be in reasonably good shape for 1982. Perhaps our most important recent action has been our decision to retain the services of the Society and Association Services Corporation (SASC). SASC will provide us with a wide variety of services, such as maintaining historical records, managing financial matters (e.g., development of budgets, financial statements, and tax reports), negotiating hotel contracts for meetings, and mailing ballots and dues statements to members. SASC provides these services for a number of other groups, including the Health Physics Society, and the expertise of Richard Burk, president of SASC, and his associates has already helped us substantially.*

*The society has several activities under way. Plenum Press has agreed to publish a series of books for us and plans have been made for two 1983 meetings, one a workshop and the other our third annual meeting. More details on these activities are given elsewhere in this newsletter.*

*In addition to these, the Special Projects Committee chaired by Robert Hockenbury is exploring the possibilities of our engaging in other activities, such as reviewing reports for regulatory agencies. This committee has received helpful advice from members experienced in such projects with other organizations, and our understanding of the legal and institutional aspects of this type of work is growing.*

*Thanks are due to Elizabeth Anderson and Joe Rodericks for their service on the 1981-82 SRA council. Their advice and work have been much appreciated. In particular, Betty Anderson did an excellent job of chairing the Nominating Committee, which developed the 1982-83 nominees for our recent ballot. Betty and Joe will both be missed.*

*The third person who has just completed a one-year term on the council, Paul Slovic, will, of course, continue as president-elect. Paul and I, as well as all other members remaining on the council, wish to welcome our newly elected members, David Hoel, Lester Lave, and Joyce McCann. We look forward to working with them.*

*As a final note, please write or call me with suggestions, complaints, questions, and offers to volunteer for committee work -- or for any other reason. The council and officers want to do the best job we can in serving the professional community of risk analysts, and the better we know your interests and the greater the membership involvement in society activities, the more successful we will be.*

*Chris Whipple  
Electric Power Research Institute  
3412 Hillview Avenue  
Palo Alto, California 94303  
Phone: 415-855-2443*

## RETIRING PRESIDENT CUMMING HONORED AT ANNUAL MEETING

In his first official act as SRA's 1982-83 president at the society's 1982 annual meeting held on June 17 in Arlington, Virginia, Chris Whipple commended outgoing president Robert B. Cumming for his work and dedication during the society's first year. Not only did Cumming serve as president, he also served as the editor of *Risk Analysis*, the society's quarterly journal, a position he still holds.

On behalf of the membership, Whipple presented Cumming with a plaque which read:

Society for Risk Analysis

presented to

Robert B. Cumming

In appreciation for his services  
as president, 1981-1982

Before turning the meeting over to Whipple, Cumming reviewed the year's activities and thanked all officers and council members who

had helped get the society going. He made a plea for the membership to offer assistance to the various committees and solicited suggestions from individuals on the mechanisms which should be used with regard to the journal.

During 1981, 75 manuscripts were submitted to the journal and during the first five months of 1982 approximately 40 manuscripts were submitted. There has been a deficiency of engineering science submissions, however. Cumming commented that the SRA journal probably uses more reviewers than most journals, but that is because of the broadness of the area covered by the journal. He thanked the reviewers for their assistance.

In concluding remarks, Cumming stated that he felt the society was in good hands -- both because of the newly elected officers and council members and because the society had retained the services of Richard J. Burk, Jr., as executive secretary.

### 1982-83 OFFICERS (cont. from p. 1)

scientist in the Mathematical and Statistical Research Department of the Computer Science Division, Union Carbide Nuclear Division, Oak Ridge, Tennessee, will be serving his second year as treasurer. Both were elected to two-year terms in 1981.

#### Three New Members on Council

Three members of the SRA Council have retired after serving one-year terms, and three newly elected members, each of whom will serve three-year terms, have now joined the Council. The new members are: David Hoel, National Institute for Environmental Health Sciences, Research Triangle Park, North Carolina; Lester Lave, Brookings Institution, Washington, D.C.; and Joyce McCann, Lawrence Berkeley Laboratory, Biomedical Division, Berkeley, California. The retiring members are Elizabeth L. Anderson, US Environmental Protection Agency; Joseph V. Rodricks, Clement Associates, Washington, D.C.; and Paul Slovic, who, as noted above, is the new president-elect.

Other Council members continuing to serve are: Past-president Robert B. Cumming (1983), Oak Ridge National Laboratory; Robert W. Hockenbury (1983), Rensselaer Polytechnic Institute, New York; Norton Nelson (1983), New York University, New York, New York; Timothy O'Riordan (1983), University of East Anglia, Norwich, United Kingdom; Vincent T. Covello (1984), National Science Foundation, Washington, DC; Andrew Sivak (1984), Arthur D. Little, Inc., Cambridge, MA; and Michael C. Cullingford (1984), Joint IAEA/IIASA Project, Vienna, Austria.

### Chairs of Constitutional Committees

Chairmen of four of SRA's five constitutional committees are as follows:

---Publications Committee, Vincent T. Covello, National Science Foundation, Washington, D.C.

---Conferences and Workshops Committee, chaired by president-elect Paul Slovic, Decision Research, Eugene, Oregon.

---Membership Committee, Gordon W. Newell, National Academy of Sciences, and Timothy O'Riordan, University of East Anglia, Norwich, United Kingdom.

---Finance Committee, V. R. R. Uppuluri, Computer Sciences Division, Union Carbide Nuclear Division, Oak Ridge, Tennessee.

The chairman for the fifth committee, the Nominating Committee for 1983-84, is still to be named.

### Other Committee Chairs

In addition to the above, SRA has three designated committees whose chairmen are the following:

---Constitutional Review Committee, Michael S. Baram, Boston University School of Law, Boston, Massachusetts.

---Education Committee, Kenneth A. Solomon, The Rand Corporation, Santa Monica, California.

(Cont. on page 4)

1982-83 OFFICERS (Cont. from p. 3)

---Special Projects Committee, Robert W. Hockenbury, Rensselaer Polytechnic Institute, Troy, New York.

---Local Chapters Committee, Alan Moghissi, Environmental Protection Agency, Washington, D.C.

\*\*\*\*\*

### OVER 200 ATTEND LP/HC WORKSHOP

Over 200 persons attended the June 15-17 Workshop on Low-Probability/High-Consequence Risk Analysis held at the Hyatt Regency Hotel in Arlington, Virginia. Twelve countries were represented, including Austria, Canada, Denmark, England, France, India, Israel, Italy, Mexico, Norway, and West Germany.

Workshop attendees heard approximately 60 technical papers that described a diverse range of risk analysis activities, applications, and experiences. The papers included eight poster papers presented on the evening of June 15 and eleven presented on the evening of June 16.

Throughout the three-day workshop the sessions generated enthusiastic interdisciplinary discussions relevant to topics such as risk analysis models, uncertainty identification and analysis, statistical aspects of risk analysis, human error in risk analysis, societal issues associated with risk studies, legal and regulatory concerns in risk analysis, case studies for risk analysis, and a look at risk analysis as a profession. Comments by participants indicated that the workshop was timely and brought together researchers who are currently active in addressing the complex institutional and analytical problems and issues associated with low-probability/high-consequence events in risk analyses.

Proceedings of the workshop will be published by Plenum Press in 1983. Vincent Covello, National Science Foundation, is handling the publication of the proceedings. Covello and Ray Waller, Los Alamos National Laboratory, were co-chairmen of the workshop.

### NOTICE

Your SRA officers and members of the council would appreciate suggestions and comments regarding topics for future conferences and workshops. We would also like to know of your preferences for meeting locations. We want to accelerate our planning for such meetings because of the long lead times required for making hotel reservations.

### MEMBERSHIP STATUS REPORT

About 600 charter members joined SRA during 1980-81, including 30 students. Between January 1 and June 1, 1982, the society received approximately 425 renewals and 150 applications from new members, bringing the total membership to about 675 on June 1.

By enclosing a membership application form in this newsletter, we hope others will be encouraged to join the society. If you are already a member, give your application to someone else. And be sure that you have renewed your own membership. As noted on the enclosed form, the dues for full membership remain at \$30 and those for students remain at \$10.

Both renewals and new applications should be submitted to: Mr. Richard J. Burk, Jr., Executive Secretary, Society for Risk Analysis, 4720 Montgomery Lane, Suite 506, Bethesda, Maryland, 20014.

\*\*\*\*\*

### 1983 WORKSHOP, ANNUAL MEETING PLANNED

Tentative plans have been made for SRA to sponsor a workshop on low-level risks in early 1983. Co-sponsorships for the workshop are currently being negotiated and definite plans will be announced later.

The 1983 Annual Meeting (the third one for the society) will be held in New York in late July. The theme will be "Risk Analysis in the Private Sector." Persons interested in presenting papers at the meeting should contact members of the Conference Steering Committee: Vincent Covello, Risk Analysis Program, National Science Foundation, 1800 G. St. NW, Washington, D.C., 20550 (202-357-9828); Richard Schwing, Societal Analysis Department, General Motors, Warren, Michigan, 48090 (313-575-3240); Robert Tardiff, National Academy of Sciences, NAS 341, 2101 Constitution Avenue, Washington, D.C., 20418 (202-334-2216); Chris Whipple, Electric Power Research Institute, 3412 Hillview Avenue, Palo Alto, California, 94303 (415-855-2443).

\*\*\*\*\*

### PROCEDURES FOR FORMING LOCAL CHAPTERS

The study of the relationship of local sections to the national society is not yet complete, but interim procedures can be followed to establish local chapters. Those wishing to form a chapter should contact the society's president, who will research the request and make a recommendation to the SRA council. The two main criteria are viability and usefulness. Chapters in the Washington, D.C., area and in East Tennessee are expected to be approved soon.

## JOURNAL ISSUES ALMOST CAUGHT UP

Since our last newsletter in April, the membership should have received three Journal Issues: Issues 3 and 4 of Volume 1, and Issue 1 of Volume 2. Issue 2 of Volume 2, which comprises a forum on risk analysis, risk management and the social and behavioral sciences, is now being edited by Plenum Publishing Corporation, and the contents of Issue 3 have been determined. Titles of the papers that will be included in these two issues are as follows:

Vol. 2, No. 2

## EDITORIALS

- Robert B. Cumming *Editorial: Risk and the Social Sciences*
- Mary Douglas *Guest Editorial: How Can We Know the Risks We Face?*
- Aaron Wildavsky *Guest Editorial: Why Risk Selection Is a Social Process*

## ARTICLES: A FORUM--Risk Analysis, Risk Management and the Social and Behavioral Sciences

- Vincent T. Covello  
Joshua Menkes  
Jiri Nehnevajsa *Risk, Philosophy, and the Social Behavioral Sciences*
- Douglas E. MacLean *Risk and Consent: Philosophical Issues for Centralized Decisions*
- Harry Otway  
Kerry Thomas *Reflections on Risk Perception and Policy*
- Paul Slovic  
Baruch Fischhoff  
Sarah Lichtenstein *Why Study Risk Perception?*
- Timothy O'Riordan *Risk Perception Studies and Policy Priorities*
- Miller B. Spangler *The Role of Interdisciplinary Analysis in Bridging the Gap Between the Technical and Human Sides of Risk Assessment*

Vol. 2, No. 3

## EDITORIAL

- Robert B. Cumming *Editorial: A Question of Scale*

## LETTERS TO THE EDITOR

- Nathan Mantel *Extrapolation of Tumor Probabilities*
- David Gaylor  
John H. Farmer  
Ralph L. Coddell *Response to Mantel*
- Herbert Inhaber  
S. Norman *The Increase in Risk Interest*

## ARTICLES

- Louis A. Cox, Jr. *Sources of Artifactual Uncertainty in Comparative Risk Analyses*
- Selim Sancaktar *An Illustration of Matrix Formulation for a Probabilistic Risk Assessment Study*
- David Okrent  
William L. Baldewicz *On the Development of Threshold Criteria for Action for Light Water Reactors*
- Henry Hurwitz, Jr. *The Indoor Radiological Problem in Perspective*
- John D. Whittaker  
Randolph P. Angle  
David J. Wilson  
Mitchell G. Choukalos *Risk Based Zoning for Toxic Gas Pipelines*
- L. R. Ginzberg  
L. B. Slobodkin  
K. Johnson  
A. G. Bindman *Quasiextinction Probabilities as a Measure of Impact on Population Growth*
- Clifford H. Patrick  
Kenneth G. Manton *An Analysis of Changes in Risk Mortality from Chronic Lung Disease, 1968-1977*
- Mary C. White  
Peter F. Infante  
Kenneth C. Chu *A Quantitative Estimate of Leukemia Mortality Associated with Occupational Exposure to Benzene*

NOTE: Submissions for publication in the journal should be mailed to: Dr. Robert B. Cumming, Editor, Risk Analysis, P.O. Box 531, Oak Ridge, Tennessee, USA, 37830.

## LOGO SUGGESTIONS RECEIVED

SRA still does not have a logo, but the council expects to choose one soon - possibly at its next meeting. As noted in the last newsletter, by publication time only one logo suggestion had been received (from James A. Frazier of the National Research Council, Washington, D.C.). Since then, logo ideas have been submitted by: Herbert Inhaber, Oak Ridge National Laboratory; A. Gregory, Bethesda, Maryland; Paul Fogarty, Oak Ridge National Laboratory; and Bob Cumming, Oak Ridge National Laboratory. We are expecting additional submissions from several students from the University of Washington. The originator of the selected logo will receive a small monetary reward.

If YOU have a logo idea, mail it to: Dr. George F. Flanagan, Editor, Risk newsletter, Building 6025, Oak Ridge National Laboratory, PO Box X, Oak Ridge, TN, 37830.

\*\*\*\*\*

NOTE: NIEHS building dedication, Nov. 15-16.

## SRA TO SPONSOR BOOK SERIES

Plenum Press has agreed to publish a series of SRA-sponsored books on contemporary issues in risk analysis. The first volume will deal with economics and the social sciences, the second with health and environmental science, and the third with the physical and engineering sciences. Articles included will not have been published previously and will include both new research and review articles. All will receive peer review.

If you are interested in contributing to this series, contact: Vincent Covello, Chairman, Publications Committee, Risk Analysis Program, National Science Foundation, 1800 G. St. NW, Washington, D.C., 20550 (202-357-9828).

RISK newsletter is published quarterly by The Society for Risk Analysis.

George F. Flanagan, *Editor*  
Lorraine S. Abbott, *Associate Editor*  
Katie Lawhorn, *Production Assistant*

### SRA RECEIVES GRANTS

The Mobil Foundation, Inc., has made an unsolicited gift of \$500 to the society. The funds will be used to support student membership in SRA.

Last year the society received three grants, all to support the International Workshop on the Analysis of Actual vs. Perceived Risks, which was held June 1-3, 1981, in Washington, D.C. These grants were \$26,000 from the U.S. Nuclear Regulatory Commission, \$20,000 from the Alfred P. Sloan Foundation, and \$4,800 from the Environmental Protection Agency. An audited report has been sent to the Sloan Foundation regarding its grant.

### CALENDAR OF EVENTS

--1982 INTERNATIONAL CONFERENCE OF THE SYSTEMS MAN AND CYBERNETICS SOCIETY OF THE IEEE, October 27-30, WestIn Hotel, Seattle, Washington. (Co-located with 26th ANNUAL MEETING OF THE HUMAN FACTORS SOCIETY, October 25-29.) For information on SMC Conference, contact James A. Wise, JO-20 University of Washington, Seattle, WA 98105, phone 206/5433-2018.

--INTERNATIONAL SYMPOSIUM ON RECENT ADVANCES IN NUCLEAR MATERIAL SAFEGUARDS, November 8-12, Vienna, Austria. Contact: R. Najar, Conference Service Section, IAEA, PO Box 100, A-1400, Vienna, Austria.

### PUBLICATIONS

--"The Risk Analysis Research and Demonstration Act of 1981" (Hearing before the Subcommittee on Science, Research and Technology of the Committee on Science and Technology, U.S. House of Representatives, 97th Congress, 1st Session, September 24, 1981), No. 58, U.S. Government Printing Office, Washington, 1982.

--"Managing Flood Risk: Technical Uncertainty in the National Flood Insurance Program," by M. S. Baram and J. R. Miyares, reprint from Columbia Journal of Environmental Law, Vol 7, No. 2, 1982.

--Available from CEN TED (Clark University Center for Technology, Environment, and Development, Worcester, Massachusetts, 01610): miscellaneous reprints of journal articles on risk authored by CEN TED members. \$1 for handling. Contact James C. Blair, 617/793-7283, for list of papers.

--"Judgment Under Uncertainty: Heuristics and Biases," edited by D. Kahneman, P. Slovic, and A. Tversky, Cambridge University Press, 32 E 57th, NY, NY, 10022.

### 1981 FINANCIAL STATEMENT

#### Revenues:

Dues \$13,782.50

#### Expenses:

Computer	\$ 896.95
Council	747.55
Journal	10,120.00
Miscellaneous	86.00
Newsletter	482.53
Postage	324.31
Supplies	248.04
Workshop	117.50

Total \$13,022.88

-V. R. R. Uppuluri  
Treasurer

RISK newsletter  
Society for Risk Analysis  
P.O. Box 531  
Oak Ridge, TN, USA 37830

Bulk Rate  
U. S. Postage  
PAID  
Permit #12  
Oak Ridge, TN