RISK newsletter

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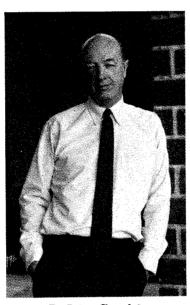
October 29: SRA 1989 Meeting in San Francisco

Garrick Takes SRA Helm

B. John Garrick, president and chairman of the board of Pickard, Lowe, and Garrick, Inc., Newport Beach, California, will become the Society's ninth president at its 1989 Annual Meeting in San Francisco. During the past year he has served as the chairman of the Annual Meetings Committee, an office traditionally held by the president-elect.

Garrick, an innovator in quantitative risk assessment (QRA) for large engineered systems, particularly nuclear power, aerospace, and chemical process systems, believes that the discipline of risk analysis is "beginning to look like a coherent and structured applied science" and that by quantifying risks, it can "help lead industry, government, and the general public to a consensus on what actions to take and how to allocate our risk reduction resources more effectively."

He believes SRA has a responsibility to ensure that QRA becomes an accepted and useful applied science. This can be done by continuing to provide an interdisciplinary forum for the discussion of the rational management of societal risk and continuing to insist on clarity in what is meant by risk analysis, and especially what



B. John Garrick

is meant by QRA. With regard to the latter, he says, "the key is new ideas, intellectual debate, appeal to young achievers, meaningful results, and a demand for quality in theory and practice."

To encourage students to enter the QRA field, the Massachusetts Institute of Technology and PLG established the B. John Garrick Fellowship in Nuclear Engineering in 1986 to support graduate students doing research in (Continued on page 3.)

The 1989 Annual Meeting of the Society for Risk Analysis will be held October 29-November 1 at the Hotel Nikko in San Francisco, the first West Coast site ever to be chosen by the Society. Hosted jointly by SRA's Northern and Southern California Chapters, the meeting will feature approximately 70 sessions in the Society's three areas of interest: social policy; health and environment; and engineering and statistics. The presentation response has been outstanding and promises to make it an exceptionally interesting meeting.

Chris Whipple of the Electric Power Research Institute and Ray Boykin of California State University-Chico are general co-chairmen of the meeting, and Bill Gekler and Brian Fagan, both of Pickard, Lowe, and Garrick, are technical program chairman and assistant chairman, respectively.

Organizing Committee

In scheduling the sessions, the program chairmen were assisted by several coordinators for the three areas of interest. Caron Chess, Rutgers University, and Roger Kasperson, Clark University, coordinated the social policy sessions; Curtis Travis and Mary Oran, both of Oak Ridge National Laboratory, coordinated the health and environment sessions; and John Garrick and Bill Gekler, both of Pickard, Lowe, and Garrick, coordinated the engineering and statistics sessions. Garrick, the president-elect, is the current chairman of the Annual Meetings Committee. (Continued on page 2.)

Other members of the 1989 Annual Meeting Organizing Committee are: Jeff Daniels, Lawrence Livermore National Laboratory, arrangements chairman; Joe Fiksel, Teknowledge, Inc., budget and finance chairman; and SRA President Dick Schwing, General Motors Research Laboratories, plenary session chairman. Sue Burk of the SRA Secretariat also assisted in arrangements and publications.

Meeting Openers

The first activity of the 1989 Annual Meeting will be the convening of SRA's current (1988-89) council from 1 to 4 PM on Sunday, October 29. The council meeting will be followed by registration for the meeting at 4 PM and a general reception from 5 to 7 PM. [Note: The new council (for 1989-90) will hold its first meeting on Tuesday, October 31, at 7 PM.]

Preliminary to the general meeting a two-day training course on "Quantitative Methods and Sources of Uncertainty in Health Risk Analysis" will be conducted on Friday and Saturday. The leaders will be Kenneth G. Brown and Douglas J. Crawford-Brown, both of Chapel Hill, North Carolina.

Plenary Session

The speaker for the Monday morning plenary session will be William D. Ruckelshaus, twice the administrator of the U.S. Environmental Protection Agency and currently chairman and chief executive officer of Browning-Ferris Industries, Inc. During the session he will be awarded SRA's Distinguished Contribution Award (see separate story).

Business Meeting

A business meeting will be held Monday at 5:00 PM. The results of the recent Society elections will be announced and committee reports and business matters requiring membership action will be presented.

Luncheon Banquet

In lieu of an evening banquet, the Organizing Committee opted for a Luncheon Banquet on Tuesday. Donald Kennedy, president of Stanford University, will speak on "Risk Analysis:

Annual Meeting Schedule

Sunday, Oct. 29

1:00 PM - 1988-89 Council Meeting

4:00 PM - Registration

5:00 PM - General Reception

Monday, Oct. 30

8:00 AM - Registration

9:00 AM - Plenary Session

10:30 AM - Morning Sessions

Noon - Lunch Break

1:30 PM - Afternoon Sessions

5:00 PM - SRA Business Meeting

Tuesday, Oct. 31

7:30 AM - New Member Breakfast

8:00 AM - Registration

8:30 AM - Morning Sessions

Noon - Luncheon Banquet

1:30 PM - Afternoon Sessions

3:30 PM - PC Software Demo

5:00 PM - Global Risk Analysis

Section Meeting

7:00 PM - 1989-90 Council Meeting

Wednesday, Nov. 1

7:30 AM - Chapter Breakfast

8:00 AM - Registration

8:30 AM - Morning Sessions

Noon - Luncheon Banquet

1:30 PM - Afternoon Sessions

Lessons from the War Zone' (see separate story).

Area Emphases

As in the past, the Annual Meeting program will reflect the interdisciplinary character of the Society. Immediately following the plenary session, the health and environmental area will sponsor a super session on AIDS chaired by Lincoln Moses of Stanford University, and on the following day the engineering and statistics area will sponsor a super session on earthquakes chaired by Allin Cornell of Stanford. Other topics within the Society's three areas of interest will also be emphasized throughout the program.

Global Risk Analysis

How risk analysis can contribute to the preservation of the global environment will be the topic of a Tuesday session on special risk topics. Some of the participants are among those who are organizing SRA's Topical Section on Global Risk Analysis (see May, 1989 issue of Risk newsletter). The section will hold a planning meeting at 5 PM on Tuesday, October 31, with Mike Tiller of Tiller Consulting Group acting as the chair.

Other international issues will be addressed on Monday and Tuesday in a two-session panel discussion on the transfer of hazardous technology to developing countries.

International representation at the meeting will be provided by SRA members from Canada, Japan, Sweden, Germany, and The Netherlands.

Toxic Materials Risks

SRA liaison activities with other societies have resulted in a two-session series on Tuesday being cosponsored by the American Statistical Association's Committee on Nuclear Regulatory Research. The sessions, chaired by Mike Ginevan of Risk Focus, will compare risk analyses for toxic chemicals with those for radioactive materials.

Risks from toxic materials will also be addressed in a number of other sessions. Several sessions will deal with inhalation and/or ingestion exposure assessments, with one reporting on California's experience with its Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986). Risks posed by various types of incinerators (municipal, hazardous waste, utility, mobile) and by hazardous waste land disposal sites will also be discussed.

Right-to-Know Sessions

A number of sessions will be devoted to the Community Right-to-Know Act (SARA Title III). A Monday workshop, chaired by Ann Fisher of the U.S. Environmental Protection Agency, will be titled "Risk Communication — Title III Focus," and three Wednesday sessions, organized by Vlasta Molak of the National Institute of Occupational Safety and Health, will cover various aspects of the act, including the viewpoints of both the industrial and technical community and the public.

Risk Perception

Also on Wednesday, a four-person panel will discuss the recently released National Academy of Sciences study on risk perception. Risk perception and risk communication will be addressed in at least nine other sessions and will be complemented by sessions on risk and ethics, risk assessment and policy, the politics of risk, dealing with risk controversy, and liability and compensation.

Risk Methods

A number of sessions will address risk analysis methods and risk modeling, in particular the modeling of nuclear power plant components and ecological modeling. Two sessions will cover specific quantitative risk assessments, with others addressing uncertainties in risk assessments, probability and statistics, and new ideas in risk assessment (e.g., hormesis). Several sessions will focus on cancer risk assessment techniques and carcinogenesis modeling.

Available exposure data bases for risk assessments will also be discussed, including data for exposure to radon, arsenic, ozone, and dioxin. A Chernobyl data base will also be presented.

Large Engineered Systems

Sessions on risk assessment of engineered systems will be oriented toward space systems, offshore platforms, nuclear power plants, and the chemical process industry. A Tuesday session will focus on the separation of risk analysis and risk management.

Computer Software Demonstration

A computer software demonstration session is scheduled for Tuesday, October 31 from 3:30 PM to 5:00 PM. This session should provide an excellent opportunity for individuals or companies to demonstrate their risk analysis related software. Those who desire to demonstrate software must reserve table space by contacting Bill Gekler at 714-650-8000 by October 25, 1989.

Other Topics

Numerous other topics will be addressed during the 1989 Annual

SRA Annual Meeting Session Chairs

Note: The session numbers given here do not always correspond to those in the preliminary program, which has been revised extensively. The chairs and persons presenting papers should have received notice of any changes impacting their sessions. If you have any questions regarding the changes made, contact Sue Burk at the Secretariat (703-790-1745).

MAM-A: Richard Schwing MAM-B: Lincoln Moses MAM-C: Yacov Haimes MAM-D: Not confirmed MAM-E: Eugene Rosa MAM-F: Douglas MacLean MAM-G: Roger Kasperson MPM-A: Cathy St. Hilaire

MPM-B: Lorenz Rhomberg
MPM-C: Nathan Siu
MPM-D: Allen White
MPM-E: William Freudenburg
MPM-F: Adam Finkel
MPM-G: Yugal Luthra
MPM-H: Ann Fisher
MPM-I: Ann Fisher
MPM-J: Cathy St. Hilaire
MPM-K: Kurt Runke
MPM-L: Stan Hayes
MPM-M: Ram Kulkami
MPM-N: Stan Kaplan
MPM-O: Brandon Johnson

MPM-P: Ola Svenson

TAM-A: Michael Ginevan TAM-B: Theodore Sterling TAM-C: Donald Wilson TAM-D: Adam Finkel TAM-E: Robert Mulvihill Harris Greenberg TAM-F: Richard Schwing TAM-G: Cheryl Travis TAM-H: Allin Cornell TAM-I: Michael Ginevan TAM-J: George Alexeeff TAM-K: Donald Wilson TAM-L: Raymond Freeman TAM-M: Rufus Morison TAM-N: Brandon Johnson TPM-A: Fred Hoerger TPM-B: Lauren Zeise TPM-C: Raymond Freeman TPM-D: Helina Brown TPM-E: Lloyd Philipson TPM-F: Joanne Nigg TPM-G: George Apostolakis

TPM-H: Holly Hattemer-Frey

TPM-I: Gay Goodman

TPM-J: Ali Mosleh

WAM-A: Vlasta Molak
WAM-B: Roger Sielken
WAM-C: Larry Rheins
WAM-D: Adam Finkel
WAM-E: Robert Long
WAM-F: Andrew Sivak
WAM-G: Ann Fisher
WAM-H: Vlasta Molak
WAM-I: Ann Fisher
WAM-J: Alan Rulis
WAM-L: Robin Cantor
WAM-K: Hatice Cullingford
WAM-L: Robin Cantor
WAM-M: John Perrecone

WPM-A: Joyce McCann
WPM-B: Steven Washburn
s WPM-C: Art Schuyler

TPM-K: Dan Byrd

TPM-L: Jeanette Tranth

TPM-M: Michael Tiller

Elmer Offenbacher

WPM-A: Joyce McCann WPM-B: Steven Washburn WPM-C: Art Schuyler WPM-D: Mardyras Kazarians WPM-E: Rob Coppock WPM-F: Vlasta Molak

Meeting, including applications of risk assessment to economic analyses, social science theory and risk, and computer risk assessment. Altogether, the program, which will usually be offering seven concurrent sessions, will include approximately 285 papers.

Garrick Takes Helm

(Continued from page 1.)

probabilistic risk and reliability analysis. A similar fellowship was established at the University of California, Los Angeles.

Garrick received his MS and PhD in engineering and applied science at UCLA and is currently an adjunct

professor there. He received his BS in physics at Brigham Young University; in 1955 he graduated from the prestigious Oak Ridge School of Reactor Technology. His experience includes 18 years with Holmes & Narver, five years with the U.S. Atomic Energy Commission, and 14 years at PLG.

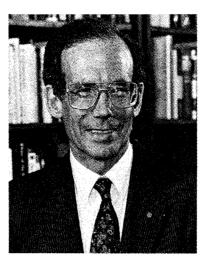
Garrick is a charter member of SRA and has been involved in numerous Society activities, including serving on the council, 1986-88; chairing the Membership Committee, 1986-87; serving on the Awards and Nomination Committees, 1987; directing three SRA-sponsored short courses on risk analysis and management in industry, 1987 and 1988; and initiating SRA's Southern California Chapter.

Kennedy Is Luncheon Speaker

Donald Kennedy, president of Stanford University, will be the speaker at the SRA Annual Meeting Luncheon on Tuesday at 1:30 PM. His topic will be "Risk Analysis: Lessons from the War Zone."

Kennedy became the eighth president of Stanford in 1980, the second biologist to hold that position. A Stanford faculty member since 1960, he has served as chairman of the University's Department of Biological Sciences, chairman of the Program in Human Biology, and vice president and provost. In 1974, he was appointed to the Benjamin Scott Crocker Professorship in Human Biology and in 1976 received the Dinkelspiel Award, the University's highest honor for service to undergraduate education.

With three degrees in biology from Harvard University, Kennedy's research interests have centered on nervous systems and the control of behavior. He has served on National Academy of Sciences com-



Donald Kennedy

mittees on pesticide use and on improving the world's food supply. In 1976-77, he was Senior Consultant to the Office of Science and Technology Policy in the Ford White House, and during the Carter presidency, he served for two and half years as Commissioner of the Food and Drug Administration.

Forum on Risk of Extreme Events

The SRA-sponsored Forum on Risk of Extreme Events, announced in the last newsletter, will be held December 12-13 at the Dupont Plaza Hotel, 1500 New Hampshire Avenue, N.W., Washington, D.C. 20036 (Phone 202-483-6000). The lectures and workshops in the Forum will address the risk assessment/management process, which comprises both quantitative/empirical and qualitative/normative analyses, with a focus on risks from extreme and catastrophic events.

The Forum coordinator is Yacov Y. Haimes, chairman of SRA's Conferences and Workshops Committee and director of the Center for Risk Management of Engineering Systems at the University of Virginia. The topics to be covered and the faculty are:

"Uncontrolled Release of Toxic Chemicals," by Elizabeth Anderson, president, Clement Associates; "Ouantitative Risk Assessment with Applications" and "Recent Advances in Quantitative Risk Assessment," by B. John Garrick, president and CEO, Pickard, Lowe, and Garrick: "The Process of Risk Assessment and Management," "Risk-Cost Tradeoff Analysis with Applications," and "Methodologies for the Quantification of Risk of Extreme Events with Applications," by Haimes; and "Risk of Extreme Events with Application to Aerospace," by General (Ret.) Alton D. Slay, president, Slay Enterprises, Inc.

The cost of the Forum will be \$275 (\$150 for students). Send applications to the Secretariat at the address given on the back of this newsletter.

Swedish Risk Collegium Established

A Risk Collegium was established in Stockholm, Sweden, in November 1988 to enhance communication between laymen, decision makers, and experts on various issues of risk in the country and also to promote international cooperation in risk analysis, risk assessment and risk control. The membership is limited to 40 independent scientists and other experts, with Bo Lindell as the first chairman and Torbjörn Malmfors as secretary. As its first official event, the Collegium held a one-day symposium on April 29 in Stockholm on the comparison of risks.

Correspondent: Bo Holmberg, National Institute of Occupational Health, S-171 84 Solna, Sweden (Phone 46 8 730 91 00; Fax 46 8 730 19 67).

Schroy Honored

SRA member Jerry M. Schrov has been named a Senior Fellow by Monsanto Company. A chemical engineer who joined Monsanto in 1963, he was cited for "outstanding accomplishments in applying chemical engineering technology to the areas of safety, health and environmental control." In addition, he has made "significant contributions to the development of techniques that engineers throughout the chemical industry can use to characterize the impact of chemicals on the health of employees and of members of communities surrounding production facilities."

1987 Proceedings

The proceedings of the 1987 SRA meeting in Houston, published by Plenum Publishing Corporation as Volume 7 in the series "Advances in Risk Analysis" and titled Risk Assessment in Setting National Priorities (James J. Bonin and Donald E. Stevenson, editors), is now available at a special rate of \$45 to SRA members. Place your order through the Secretariat (see address on back page), making your check payable to SRA.

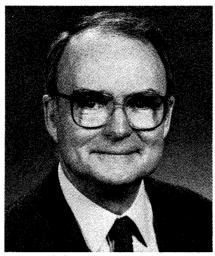
1989 Distinguished Contribution Award Goes to William D. Ruckelshaus

William Doyle Ruckelshaus, the first and fifth administrator of the U.S. Environmental Protection Agency, will be presented the Society for Risk Analysis' 1989 Distinguished Contribution Award at the plenary session of the SRA Annual Meeting on October 30. He will also address the session.

Ruckelshaus is cited by SRA not only for his past interest and work but also for his continuing efforts in environmental matters. Recently, for example, he served as U.S. representative to the United Nations World Commission on Environment and Development. Currently chairman and chief executive officer of Browning-Ferris Industries, Inc., of Houston, Texas, one of the nation's largest waste disposal companies, he has repeatedly interrupted his private career for public service.

Law Background

Born in Indianapolis, Indiana, on July 24, 1932, Ruckelshaus graduated cum laude from Princeton University in 1957 and obtained his law degree from Harvard University in 1960. While associated with the law firm of Ruckelshaus, Bobbitt and O'Connor, he served as deputy attorney general of Indiana from 1960 to 1965 and as minority attorney for the Indiana Senate from 1965 to 1967. He was a member of the Indiana House of Representatives and its majority leader from 1967 to 1969. After running unsuccessfully against Senator Birch Bayh for the Indiana seat in the United States Senate, he was appointed by President Nixon as Assistant Attorney General in charge



William D. Ruckelshaus

of the Civil Division for the U.S. Department of Justice for the years 1969-70.

First EPA Administrator

In 1970, Ruckelshaus became the first administrator of EPA, a position he held until April 1973, when he was appointed acting director of the Federal Bureau of Investigation. In the same year, he was named deputy attorney general of the U.S. Department of Justice, leaving that post in 1974 to form and be a senior partner in the Washington, D.C. law firm of Ruckelshaus, Beveridge, Fairbanks & Diamond.

In 1976 Ruckelshaus went to Tacoma, Washington, to become senior vice president for Law and Corporate Affairs of the Weyerhaeuser Company, one of the largest forest products firms in the U.S. In that position, he was responsible for setting policy and coordinating the company's key external relationships and its legal service functions.

Return to EPA

Responding to a call from President Reagan, he became EPA's fifth administrator in May, 1983. He was unanimously confirmed by a vote of 97-0 in the United States Senate and is credited with restoring confidence in the agency during his two-year term.

In 1985, he left the EPA to join Perkins Coie, joining Browning-Ferris in 1987.

Public Service Continues

Ruckelshaus is continuing in public service as a member of the board of trustees of the Conservation Foundation/World Wildlife Fund; the Henry M. Jackson Foundation; the William and Flora Hewlett Foundation; the Florence and John Schumann Foundation; the Scientist's Institute for Public Information; and the Trilateral Commission. He is also a member of the Board of Trustees of Princeton University.

In addition, he serves as a director of several corporations, including Cummins Engine Company; Monsanto Company; Nordstrom, Inc.; Texas Commerce Bancshares, Inc.; and Weyerhaeuser Company.

Ruckelshaus and his wife, the former Jill Strickland, have five children and reside in Houston, Texas.

Chevron Offers Risk Analysis Research Fellowship

A full-time university-based postdoctoral fellowship is available to support research in one of the basic areas of human and environmental risk analysis or risk assessment (e.g., dose-response assessment, exposure assessment, risk characterization, risk communication, uncertainty analysis). The fellowship, which begins in September 1990, offers two years of support (1990-1991) at a \$35,000 to \$40,000 salary and \$10,000 to \$15,000 benefits plus expenses. Applicants must have a PhD in Science, Mathematics or Engineering. The application deadline is February 15, 1990 and the award will be announced June 15, 1990. Interested persons should send a curriculum vita, a statement of research interests, and the names of three references to Richard J. Burk, Jr. (see address on back page).

Election Results To Be Announced

The results of the recent SRA elections for presidentelect, secretary, treasurer, and three members of the SRA Council will be announced at the Annual Meeting in San Francisco.

President-Elect: Kunreuther vs. Travis

The candidates for president-elect are Howard C. Kunreuther and Curtis C. Travis, both of whom have been active in the Society throughout its nine-year history.

Kunreuther is a professor of decision science and public policy and management at the Wharton School, University of Pennsylvania, and director of the Wharton Risk and Decision Processes Center. During 1988-89, he has also been the program manager of the Decision Risk and Management Science Program of the National Science Foundation.

Travis is director of the Office of Risk Analysis at Oak Ridge National Laboratory and since 1983 has been editor-in-chief of SRA's journal *Risk Analysis*. He received a Distinguished Service Award from the Society in 1984.

Secretary: Lynn vs. Molak

The nominees for secretary are Frances M. Lynn, who currently holds that position, and Vlasta Molak, current chairman of the Subcommittee on International Affiliations. The office of secretary has a two-year term. Lynn is associate director of the Institute for Environmental Studies at the University of North Carolina at Chapel Hill, and Molak is with the Division of Standards Development and Technology Transfer of the National Institute of Occupational Safety and Health in Cincinnati.

Clark University, USSR Academy Negotiate 5-yr Project

Clark University's ET Program (Earth as Transformed by Human Action), a joint research program of the Graduate School of Geography and CENTED that is supported by the Andrew Mellon Foundation, has negotiated a 5-year bilateral research project on "critical environmental zones in global change" with the Institute of Geography, USSR Academy of Sciences. The project's two-fold purpose is (1) to develop a conceptual framework for understanding the human dimensions of global change through the study of regions in environmental stress and (2) to employ this scheme through a series of case studies led by international research teams.

Roger Kasperson and B. L. Turner II represented the ET Program and its NSF-supported Project on Critical Environmental Zones, and V. Kotlyakov, N. Glazovsky, and G. Sdayuk represented the Institute of Geography.

Treasurer: Boykin vs. Zimmerman

Candidates for the two-year office of treasurer are Raymond F. Boykin and Rae Zimmerman. Boykin is associate professor of management science and director of the Center for Risk Management at California State University, Chico. Zimmerman is associate professor of the Graduate School of Public Administration, New York University, and director of three university-based Annual Institutes in Risk Management in Environmental Health and Protection.

Three Council Positions

The candidates for the three council positions, each for three-year terms, are paired as follows: Roger E. Kasperson vs. Donald E. Stevenson; R. A. (Tony) Cox vs. Marc Poumadère; and Peter B. Hutt vs. Michael R. Taylor.

Kasperson is the director of the Center for Technology, Environment, and Development of Clark University in Worcester, Massachusetts; and Stevenson is a consultant in toxicology with Shell Oil Company, Houston.

Cox is chief executive of Technica Limited, a London-based international consultancy for industrial safety studies; and Poumadère is program director for Institut SYMLOG in France. Both are members of the executive committee of SRA-Europe.

Hutt, a former council member, is with the Washington, D.C. law firm of Covington and Burling, and Taylor is with the Washington law firm of King and Spalding. Both firms specialize in food and drug laws and risk assessments.

Second Call!

Srinivas Emani and Jeanne Kasperson of CENTED are in need of information on risk and risk-related courses taught in various academic and professional programs. They are compiling an SRA-sponsored guide on such courses that are available and would like it to be as inclusive as possible. If you have information that should be included (i.e., course title, location, instructor, cost, etc.), please deliver it at the 1989 Annual Meeting to Kasperson, who will be at the publications display table, or mail it to Emani at the following address: CENTED, Clark University, 950 Main Street, Worcester, MA 01610.

Chapter News

(Note: SRA Council member Catherine St. Hilaire, ENVIRON Corporation, has agreed to serve as the Society's chapter liaison and will meet with chapter representatives during the 1989 SRA Annual Meeting at a Chapter Breakfast, scheduled to be held in the Mexico Room at 7:30 AM, Wednesday, November 1.)

Northern California Chapter

The Northern California Chapter held a dinner meeting on October 4 at which Daniel Kahneman, professor of psychology at the University of California, Berkeley, spoke on "Fallacies in the Assessment and Evaluation of Risk." He reported on some psychological research documenting systematic errors in the assessment of probabilities and irrationalities in the evaluation of risk, as well as inconsistencies in people's willingness to pay for reductions in risk

A January dinner meeting on the Peninsula is planned, with the outgoing chapter president, Chris Whipple of the Electric Power Research Institute, as the speaker.

Southern California Chapter

The Southern California Chapter is holding elections, for which the ballot is as follows: For president-elect, Larry Froebe, Bill Hannaman, and Bob Mulvihill; for secretary, Shimson Arueti; and for councilors, Chester J. Everline, Terry H. Fogle, Mardy Kazarians, John E. Koch, Douglas Orvis, and Theo G. Theofanus.

Philadelphia Chapter

The Philadelphia Chapter met at the University of Pennsylvania on August 23 to hear Martin Siegel, president of Siegel-Houston Association in Washington, DC, speak on "Explaining Risk to the Public." On November 9, Roger Kasperson will be the speaker at a 6:30 PM meeting, to be followed by an 8:00 PM dinner. His tentative title is "Current Issues in Risk Communication." For further information, call Martin Needleman, 215-527-6475, or Rudy Yaksick, 215-898-8412 (or 215-568-0034).

National Capital Area Chapter

Stephen L. Brown, president-elect of the National Capital Area Chapter reports that on July 11 the chapter heard Donald L. Ritter, Congressman from the 15th district of Pennsylvania, present his views on the role of risk assessment in shaping legislative and regulatory approaches to the control of health, safety, and environmental hazards. Ritter, the only member of Congress with an earned doctorate in the sciences, is a proponent of risk-based decision-making. He illustrated his points with examples from nuclear power, climatic changes from ozone depletion or the greenhouse effect, and exposures to chemicals. He emphasized, however, that risk assessors would continue to have relatively little influence over legislation unless they became more actively involved in presenting their case to congressional representatives and their staffs. Following a query from the local membership, he encouraged the chapter to provide congressional staff with the opportunity to learn more about the uses and abuses of risk assessment through group seminars or individual meetings. The dinner meeting was held at the Naval Medical Center Officers' Club.

Research Triangle Chapter

On September 21-22, the Research Triangle Chapter cosponsored, with the Technology Section of the Public Relations Society of America, a two-day conference on biotechnology and risk communication in Research Triangle Park, North Carolina. The program on the first day, titled "Field of Dreams: Communicating and Marketing Biotechnology," focused on an emerging industry that will affect the drugs, the food, and the farms of the future. The program on the second day, titled "Risky Business: Understanding and Communicating Risk," explored the different perspectives of risk among the public, researchers, and reporters. The keynote speaker was Peter Sandman, director of the Environmental Communication Research Program of Rutgers University.

Ohio Chapter

SRA's new Ohio Chapter has just completed its first election of officers. The results are: president, Steven Lutkenhoff; president-elect, Ronald Marnicio; secretary, Jeffery Swartout; treasurer, Jacqueline Patterson; and councilors, William Rish (2-year term), Roy Albert (1-year), and Richard Hertzberg (1-year). Lutkenhoff, Swartout, Patterson, and Hertzberg are all with the USEPA Environmental Criteria and Assessment Office in Cincinnati; Marnicio and Rish are with EBASCO Environmental in Columbus; and Albert is with the University of Cincinnati Medical Center.

On September 12, two members of the chapter, Marnicio and Hertzberg, co-chaired the risk analysis session of HazTech International '89 Conference and Exhibition held at the Cincinnati Convention Center. Papers presented at the session included: "Risk Management Beyond Regulatory Compliance" (by Rish and Marnicio); "Establishment of a Hazardous Waste Management Program at the University of Cincinnati" (B. Keyes, S. Clark, and P. Scarpino, University of Cincinnati); "The Underlying Basis of Risk Management Decisions" (M. Dourson and Lutkenhoff, USEPA); and "From Risk Assessment to Risk Management: Case History of a Hazardous Waste Site" (G. Edmisten, Harding Lawson Associates).

The chapter will have its first executive committee meeting on October 12 to establish goals and strategies for the next year. For further information call Jeff Swartout at 513-569-7811 or Bill Rish at 614-761-2007.

SRA Contacts with Other Countries Increasing

Vlasta Molak, SRA's International Coordinator, reports that the development of an SRA Section in the Philippines is well under way and preliminary steps have been taken in Poland, Argentina, and Yugoslavia. Full membership in the Society will depend, however, on the policy the SRA Council adopts toward developing countries, especially with respect to the current dues requirements, which some countries feel they cannot meet.

The Philippines

Corazon Pe Benito Claudio, president of the Technology, Risk, and Development Foundation, Inc., Manila, wrote in May that a board of 15 members was registering with the government's Security and Exchange Commission as a local chapter of SRA, although only she was at the time a full member of the international Society. In July she reported that the group was meeting monthly and had several projects lined up, including establishing a local section newsletter. Persons wishing to learn more about the group should contact: Corazon Pe Benito-Claudio, Director, Technology and Risk Assessment and Management Program (TARAM), National Engineering Center, University of Philippines, P.O. Box 241, Greenhills Post Office, San Juan, Metro Manila, Philippines (Phone 673-2619 or 673-0820, Fax (632) 8187150).

Poland

Barbara Malchevskaya, a Polish scientist, is interested in forming an SRA section in her country. Her address is: Toxicological Information Center, Institute of Occupational Medicine, 8 Tercsy, PO Box 199, 90-950 Lodz, Poland (Phone 42 55-22-50, Ext. 165).

Argentina

Maria Meca, who has just returned to Argentina following graduate studies in the U.S., hopes to establish an SRA section in her country. She can be reached at: Espejo 144, 1 Peso, Dpato 2, Mendoza, Argentina (Phone 1154-61/230-512 or 231-526).

Yugoslavia

In Yugoslavia, Nikola Mashich, an SRA supporter, is attempting to organize a section. His address is: Institute Ruder Boskovic, Bijenicka 52, 41000 Zagreb, Yugoslavia.

Shanteau, Keller Head NSF's DRMS Program

James Shanteau, on leave from the Department of Psychology, Kansas State, is the new director of the National Science Foundation's Decision, Risk, and Management Science (DRMS) Program, replacing Howard Kunreuther, who has returned full time to Wharton School, University of Pennsylvania, following a one-year term at DRMS. Joining him as the new associate director is L. Robin Keller, on leave from the Graduate School of Management of the University of California, Irvine. She replaces Robin Gregory, who has returned to Decision Research after an 18-month DRMS assignment.

Program

DRMS solicits proposals (target dates January 15 and August 15) on fundamental issues in management science, risk analysis, public policy decision making, judgmental processes, behavioral decision making, organization design, and decision making under uncertainty. Projects are required to both contribute to the development of theory and also add to the understanding of important applied problems.

The review process, which takes about six months, includes evaluations by outside reviewers and by the DRMS Advisory Panel. Current Panel members are Janice Beyer, Warren Hausman, Ralph Keeney, Kenneth MacCrimmon, Granger Morgan, Donald Morrison, John Payne, and Stephen Pollock. (Terms have just been completed by George Huber, Arie Lewin, Sarah Lichtenstein, and John Little.)

NSF/Private Sector Initiative

Final approval for a new NSF/private sector initiative launched by Kunreuther and Gregory is expected in time for the first of five projects planned for 1990 to be approved by January 15. The program awards a principal investigator up to \$75,000 per year to match private sector support. A key contact person within the private sector is required.

Other NSF programs available to the DRMS community include grants for improving doctoral dissertation research and grants for research training groups at institutions. Information on all the programs may be obtained from Shanteau or Keller at the following address: DRMS Program, Room 336, National Science Foundation, 1800 G. Street, NW, Washington, DC 20550 (FAX 202-357-7745 [include name, DRMS, and room 336]). Phones are 202-357-7417 for Shanteau and -7569 for Keller.

SRA-Japan News

The Japan Section of SRA will hold its second annual meeting on Saturday, December 9, at the National Education Center, Toranomon, Tokyo. The all-day meeting will convene at 9:00 AM and will consist of three special sessions and one general session: (1) Epidemiological Issues in Risk Analysis, (2) Risk Issues Related to Urban Infrastructure, (3) Risk Issues Related to Product Liability, and (4) General Topics in Risk Research. The section expects to have over 15 presentations and approximately 150 participants.

The section will also publish the first issue of its journal, *Japanese Journal of Risk Analysis*, in September. The issue will contain 15 papers, society news, information about the authors, and a list of SRA-Japan's membership. The price for a single copy will be 2500 yen (approximately \$17 plus a \$6 shipment fee). Persons wishing to obtain a copy should contact: Saburo Ikeda, Secretary of SRA-Japan, Institute of Socio-Economic Planning, University of Tsukuba, Tsukuba, Ibaraki 305, Japan; Phone (0298) 53-5380; Fax (0298) 55-3849.

CALL FOR PAPERS

International Conference on Probabilistic Safety Assessment and Management (PSAM)

Beverly Hills, California February 4-7, 1991

The Society for Risk Analysis is sponsoring an international conference to provide a forum for the presentation of scientific papers covering the methodology and applications of system-based approaches to the design and safe operation of technological systems and processes. These include nuclear plants, chemical and petroleum facilities, defense systems, aerospace systems, and the treatment and disposal of hazardous wastes.

Technical sessions will be organized on safety management and decision making, risk-based regulation, probabilistic and nonprobabilistic models for safety assessment, uncertainty analysis, uncertainties in physical and chemical processes, expert judgment elicitation and use, human reliability, risk-based methods for operator training, computerized operator aids, artificial intelligence in support of safety, software system safety, implications of advances in computer power, natural phenomena, multihazard analysis, aging of systems and structure, reliability-based design, accident management, and risk communication.

Four copies of a 1000-word summary should be submitted by April 6, 1990, to the General Chairman: George Apostolakis, Mechanical, Aerospace, and Nuclear Engineering Department, University of California, Los Angeles, CA 90024-1597, USA. For further information, contact Apostolakis at Phone 213-825-1300, Telex 3716012 UCLA LSA; or Telefax 213-825-0761.

Membership Praises Journal, Wants More Feedback

At the 1988 Annual Meeting of the Society for Risk Analysis held in Washington, D.C., attendees were asked to complete a short membership survey. In addition to standard background variables, respondents were queried about their vision for the organization, their perspective on the journal, and their opinion of the annual meetings. Fifty-four people completed the survey.

Respondents gave the highest praise to the journal and commented in particular on the quality of the articles. Over half of the respondents also complimented the journal for successfully maintaining an appropriate disciplinary balance. One-third wanted the journal published more often.

Like the journal, the Society itself is valued for its interdisciplinary composition. Members describe it as providing a "unique forum" for the exchange of ideas. Some members felt that the Society had matured and grown enough to warrant establishing sections. Others suggested the Society more actively debate public policy issues.

The annual meeting was valued primarily as a place to meet professionals, including those from other disciplines. Respondents felt, however, that papers were often mediocre, that no-shows had become a problem, and that speakers too often exceeded their allotted time. Attendees also asked that speakers' addresses be included in the program. Academics expressed concern about the high registration fees and hotel rates. A number of respondents desired a more complete reporting to the membership of council activities at the business meeting and a more structured way to discuss organizational directions and to receive feedback on council actions.

Of the 54 people who completed the survey, 31% worked as consultants, 30% were in academia, 24% were from industry, and 15% were in government. They identified themselves as 70% male, 29% social scientists, 23% natural scientists, and 45% quantitative risk assessors (engineers were included in this category).

A similar survey will be administered at the 1989 Annual Meeting in San Francisco.

Frances M. Lynn SRA Secretary

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Positions Available

Careers in Exposure Assessment

Exposure assessment and multimedia modeling play an important role in the Geosciences Department at Battelle, Pacific Northwest Laboratories. Current areas of research are in development and application of multimedia and exposure assessment models to assess the impacts of hazardous constituents on human health and the environment. Our Geosciences Department has immediate openings for experienced exposure assessment staff. Candidates should have a strong career interest in the development and application of computer software for exposure and health effects calculations. The successful candidates will be responsible for conceptualizing exposure pathways, developing and applying exposure assessment computer codes, and interpreting and documenting results. A doctor's degree in chemical engineering, health physics, or related fields and a minimum of three years experience in conducting exposure assessments is preferred, or a master's degree and six years experience. Strong verbal and written communication skills are essential. U.S. citizenship is required. For consideration, please submit resume to:

Anthony F. Gasperino, Employment Services Battelle, Pacific Northwest Laboratories P.O. Box 999
K6-22, Department 162
Richland, Washington 99352
(An Equal Opportunity Employer)

Risk Assessment Career Openings

Dynamac Corporation, one of the leading consulting firms in environmental risk management, has several current career openings for highly motivated professionals in Fort Lee, New Jersey; Rockville, Maryland; Atlanta, Georgia; and Philadelphia, Pennsylvania. These opportunities range from entry level to program management positions. Ideal candidates will have excellent analytical, communication and management skills, coupled with experience in toxicology, exposure evaluation and health risk assessments. Selected individuals will apply these skills in assisting clients in managing risks and liabilities associated with CERCLA, SARA, RCRA, UST, etc. Send resume and writing sample to:

Wayne Tusa, Vice President Eastern Operations Dynamac Corporation Two Executive Drive Fort Lee, New Jersey 07024 (An Equal Opportunity Employer)

Director, Center for Risk Management

Resources for the Future (RFF), an independent, nonprofit research and educational organization, invites applications and nominations for the position of director of its Center for Risk Management, which conducts a variety of research and other activities related to the identification and assessment of risks to human health and natural ecosystems, the design of appropriate policies (public and private) to deal with them, and effective communication between policy makers and the public about these risks and policies. The director, who will report to the president and vice-president of RFF, must have a detailed knowledge of the strengths and weaknesses of the current U.S. approach to risk management; be able to work with and lead a talented, interdisciplinary staff in initiating research, policy-analytic, and educational activities to improve this approach; be

experienced in working with the diverse participants in the policy process, in order to translate the Center's work into action; and be effective in broadening the Center's funding from government, private foundation, and corporate sources. A PhD or equivalent degree is preferred. Consideration will be given to those with backgrounds in the social, natural or life sciences, law, or engineering. Salary commensurate with experience; excellent benefits. Applicants should send cover letter, curriculum vita, and the names, addresses, and phone numbers of three professional references to:

Paul R. Portney, Vice President Resources for the Future Box CRM, 1616 P Street NW Washington, DC 20036 (An Equal Opportunity Employer; Women and Minority Candidates Encouraged to Apply)

Public Policy/Management Chair

The Department of Public Policy and Management of the Wharton School, University of Pennsylvania, is seeking candidates to fill the John C. Hower Chair starting September 1990. Candidates should be full professors or advanced associate professors with a background in economics/political science/policy analysis. Economic and/or social regulation, political economy, urban-regional economics, business-government relationships, public management, and public systems operations research are major areas consistent with the Department's mission. Undergraduate, MA, MBA, and PhD degree programs are offered. Strong teaching ability and research performance are essential. Please contact:

William P. Pierskalla, Chair Hower Search Committee The Wharton School 3209 Steinberg Hall-Dietrich Hall University of Pennsylvania Philadelphia, Pennsylvania 19104-6302 (An Equal Opportunity, Affirmative Action Employer)

Risk Assessment Specialist

John Mathes & Associates, Inc., has opportunities for environmental scientists, toxicologists, and biostatisticians to perform risk evaluations and endangerment assessments in their suburban Pittsburgh, Pennsylvania, office. These assessments are part of on-going studies being performed for our industrial/private sector clients. The successful candidates must have a BS (MS preferred) in biostatistics, environmental science or engineering, or public health with at least 2 years experience in one of the following areas: risk assessment, chemical hazard assessment, fate and transport studies, toxicology, exposure assessments, or environmental chemistry. Knowledge of statistical computing techniques and data base management is desired. Position is a salaried pay status, with eligibility for all corporate benefits, including incentive bonus plan, profit sharing, retirement program, 401K plan and advancement within a modern office environment. Candidates must be legally authorized to work in the United States. For further information, contact:

Sylvia Baker John Mathes & Associates, Inc. East Park One Building 701 Rodi Road, Suite 101 Pittsburgh, Pennsylvania 15235-4586 (An Equal Opportunity Employer)



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Note: Contributions to the newsletter should be mailed to the following address:

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(Phones: 615-482-4640; 615-689-5315 [Res.])

Calendar of Events

--November 8. EVERYTHING YOU EVER WANTED AND NEED TO KNOW ABOUT THE RIGHT-TO-KNOW: Course on U.S. EPA and OSHA Right-to-Know laws [SARA, Title III (EPA) and Workers Right-to-Know (OSHA)] for small and medium size businesses. Xavier University School of Business Administration, 3800 Victory Parkway, Cincinnati, Ohio. Instructor: Vlasta Molak, National Institute of Occupational Safety and Health. Fee: \$95. Sponsored by several organizations.

--November 13-17. PCGEMS WORKSHOP (GRAPHICAL EXPOSURE MODELING SYSTEM)--MICRO COMPUTER VERSION, Center for Continuing Engineering Education, College of Engineering and Applied Science, University of Wisconsin--Milwaukee. Presented in cooperation with the Environmental Protection Agency. Fee: \$995. For questions contact: Stephen J. Scott, 414-227-3115, or Wally Ann Fricke, 414-227-3116. To enroll, phone 414-227-3200 or 1-800-222-3623 (1-800-222-4643 Wisconsin residents).

--November 14-16. EPIDEMIOLOGY AND RISK ASSESSMENT FOR LAWYERS: CURRENT DEVELOPMENTS IN ENVIRON-MENTAL, TOXIC TORT, RADIATION, AND PHARMACEUTI-CAL LAW, Harvard School of Public Health, Boston. Contact: Sharon E. Block, Office of Continuing Education, Harvard School of Public Health, 677 Huntington Avenue, Boston, Massachusetts 02115. Phone 617-732-1171.

--May 8-10, 1990. HAZTECH INTERNATIONAL 90, George R. Brown Convention Center, Hall D, Houston. Sponsored by The Institute for International Research. Contact: Rachelle Scheinbach, Institute for International Research-Bellevue, 13555 Bel-Red Road, Bellevue, Washington 98009. Phone 1-800-468-7644 (206-746-4173 in WA); Fax 206-643-2146.

--June 7-9, 1990. THE ENVIRONMENT: GLOBAL PROBLEMS--LOCAL SOLUTIONS, INTERDISCIPLINARY CONFERENCE, Hofstra University, Hempstead, New York. Sponsored by several organizations. Contact Athelene A. Collins, Hofstra Cultural Center, Hofstra University, Hempstead, New York 11550. Phone 516-560-5669 or 5670.

--June 13-15, 1990. SOLID WASTE AND RECYCLING TECH-NOLOGY 1990, Cobo Conference/Exhibition Center, Detroit, Michigan. Sponsored by The Institute for International Research. Contact Rachelle Scheinbach, Institute for International Research-Bellevue, 13555 Bel-Red Road, Bellevue, Washington 98009. Phone 1-800-468-7644 (206-746-4173 in WA); Fax 206-643-2146.

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