

# RISK *newsletter*

Published by the SOCIETY for RISK ANALYSIS

Volume 7, Number 3

September, 1987

## 1987 Annual Meeting to Address National, Individual Risks

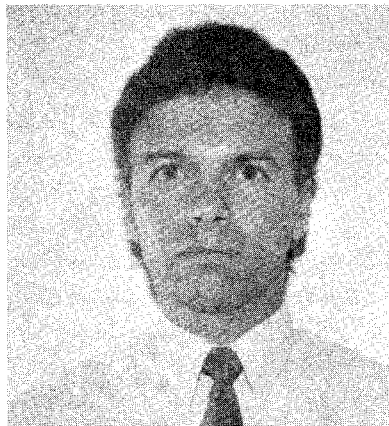
Using the theme "Risk Assessment in Setting National Priorities," the 1987 Annual Meeting of the Society for Risk Analysis will open November 1 at the Wyndham Hotel in Houston, Texas, with a special Sunday afternoon session to debate the definition of the word *risk* itself. Asked to characterize the upcoming meeting, Jim Bonin, the program chairman and a member of the Lone Star Chapter hosting the meeting, responded, "As it has developed, the program touches many areas beyond risk assessment and risk management concepts and, consequently, has a broad appeal." The appeal is obviously transnational, with participants from at least nine countries expected.

### Covello Assumes Presidency

President-elect Vincent T. Covello, who has been active in SRA since helping to found it in 1981, will be installed as the society's seventh president at its 1987 annual meeting in Houston.

Covello has been an elected member of the SRA Council since the society was formed. Over the years he also has served as chairman of the Publications, Membership, Nominations, Liaison and Annual Meetings Committees. In recognition of his service, he was presented the SRA Distinguished Service Award in 1986.

Covello is director of the National Science Foundation's Risk Assessment Program in Washington, D.C. Currently he is also on part-time assignment to the White House Council on Environmental Quality, where he is co-directing several risk assessment projects. Prior to joining the government in 1979, he was a



Vincent T. Covello

study director at the National Academy of Sciences, a professor at Brown University, and a Peace Corps volunteer in Nepal.

Covello received his PhD in quantitative sociology and social psychology from Columbia University; his BA and MA are from Trinity Hall College, Cambridge

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A survey of the program confirms Bonin's observations. Following a plenary address by Terry Yosie, director of the U.S. Environmental Protection Agency's Science Advisory Board, 39 different sessions, most with five-paper presentations, will be offered during the three days of the meeting. In general, four sessions will be held concurrently.

#### Monday Sessions

The first four sessions on Monday morning typify the diversity of the program. One session will be addressing the AIDS situation, another the modeling of cancer risks, a third the environmental releases of genetically engineered microorganisms, and a fourth a number of natural and technological hazards, such as floods and highway collisions.

The Monday afternoon sessions will be similarly varied, covering such topics as space travel, exposures to multiple chemicals, the insurance crisis, the

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## PRESIDENT'S COLUMN

### No Plateau as Yet

I have heard it said that the Society for Risk Analysis has reached a plateau and that something more is needed to move it along.

Without a doubt, something more is always needed to move any organization along, lack of movement being the surest path to stagnation and decay. However, if we are on a plateau, the statistics and events of the last eleven months do not indicate it. Of course, there is a danger in my writing about the Society's progress during my tenure when my term is yet unfinished and reverses are still possible. But good things also can still happen, and, in any case, I truly do not believe that the Society is facing a serious risk of losing ground. So where are we?

Membership, now over 1600, is up well over 20% from last year. The number of Society chapters has also increased: we now have eight chapters approved, versus five last year, and several other chapters are being formed. We also have a European section and we are developing new links with Japan. Along with this expansion, several local symposia and workshops have been held, and much has been done to seek funding to help put the Society on a sounder financial footing. In addition, we have established ties with 20 other professional societies, all of whom are cognizant of the need for risk assessment and management in their own disciplines.

The status of our publications has also improved. Our journal, *Risk Analysis*, has been expanded to accommodate the large number of good papers received, and the variety of the papers published has been broadened. *Risk newsletter* has continued to be published regularly and with increasing coverage. And the proceedings of the Society's annual meetings are catching up: the 1984 proceedings are "on the street," the 1985 proceedings are in press, and the 1986 proceedings are in progress. In addition, we have published a 1987 Membership Directory.

Now the 1987 annual meeting is about to happen with three full days of presentations on numerous topics. Sessions are planned on the risks of contracting specific diseases (AIDS, cancer), on the health and economic risks associated with technology (space travel, nuclear and chemical plants), on the risks of natural disasters (fires, floods), on the communication and management of national and international risks, and on many other subjects. If you have not yet registered for this meeting, do so now! Pre-registration forms are printed in the back of the preliminary program recently mailed to all members. Give copies to your colleagues who have not yet joined SRA. This is something we can all do to build interest in the Society and to help make this annual meeting even better than last year's record meeting.

In my pre-election statement I said it was my intention to "hand over an improved and stronger Society, as has happened at the end of the term of each past office holder," and, from what I have written above, there is a good chance I will do just that. You might think I would be satisfied. Yet I keep feeling more could have been accomplished if we had somehow grasped more opportunities—if somehow I could have persuaded a few more members to participate in the urgent tasks at hand. My not-so-secret desire to reach, within my term, the goals stated nearly two years ago by Lester Lave as he entered the presidency (ten chapters, 2000 members, multinational links firmly established, and much more) has not been achieved. Still the good work of many members has brought about significant progress, and, while I am not satisfied, I am pleased that we have moved ahead. That, in itself, means that we have not reached a plateau or, worse, that we are going down hill.

Knowing President-elect Vince Covello as I do, I suspect that he, too, will not be satisfied with reaching a plateau or with minimal progress. His term will open with Lester Lave's goals within shooting distance, but other goals will arise, including some not describable by statistics of growth or improved financial figures. Numbers are important, but "something better" lies in bringing greater breadth of view into the Society and in promoting innovative and creative thinking and ideas.

For the second time in writing these columns, I quote Lester Lave's statement in his final column: "The strength of a voluntary organization lies in the enthusiasm and energy of its members." This means *every* member. However energetic, creative and innovative your president, council, and committees may be, they need help and ideas. I hope each of you will think of what you can do to improve the Society and thus to increase its ability to serve both its members and society at large. Let there be no plateau for us—now or in our future!

And now to those of you who have worked so hard the past eleven months, I say, "Aloha and mahalo nui loa!"

Paul F. Deisler, Jr.

President's Address: 11215 Wilding Lane, Houston, TX, 77024, Phone 713-467-3080.

## OVERVIEW OF 1987 ANNUAL MEETING

### *Schedule*

#### **Sunday, November 1**

- 4:00 PM: Registration (Until 8:00 PM)
- 5:00 PM: Special Session on Definitions
- 6:30 PM: Mixer—Cash Bar

#### **Monday, November 2**

- 7:30 AM: Registration (Until 5:30 PM)
- 8:30 AM: Plenary Session—Speaker, Terry Yosie, Director, Science Advisory Board, USEPA
- 10:00 AM: Technical Sessions
- 1:15 PM: Technical Sessions
- 4:00 PM: Technical Sessions
- 5:30 PM: Annual Business Meeting
- 7:30 PM: Special Session on Risk Analysis and Ethics

#### **Tuesday, November 3**

- 7:30 AM: Registration (Until 5:30 PM)
- 8:30 AM: Technical Sessions
- 10:45 AM: Technical Sessions
- 1:15 PM: Technical Sessions
- 3:45 PM: Technical Sessions
- 6:30 PM: Reception—Cash Bar
- 7:30 PM: Banquet—Speaker, Gilbert White, Recipient of SRA's 1987 Distinguished Contribution Award

#### **Wednesday, November 4**

- 7:30 AM: Registration (Until 3:30 PM)
- 8:30 AM: Technical Sessions
- 10:45 AM: Technical Sessions
- 12:00 PM: Luncheon—Speaker, Neil Frank, KHOU Weatherman
- 1:30 PM: Technical Sessions

## Annual Meeting

(Story continued from page 1.)

modeling of several types of risks, nuclear and air toxics exposures, the use of risk analysis by industry, and, again, natural disasters.

### Business Session

The society's annual business meeting will be held at 5:30 PM Monday, at which time outgoing President Paul Deisler will hand over his gavel to incoming President Vincent Covello, other new officers will be introduced, and business for the year will be conducted.

### Special Ethics Session

The business meeting will be followed by a special session on "Risk Analysis and Ethics" at 7:30 PM. The special session, responding to the concerns expressed by President Paul Deisler in his last editorial, will be sponsored by the Lone Star Chapter.

### Tuesday Sessions

The eight sessions on Tuesday morning will add to the meeting's agenda the topics of risk communication and international approaches to risk management. In addition, vehicle transport hazards, risk assessment at the Food and Drug Administration, and regulatory initiatives (e.g., stratospheric modification, right-to-know initiatives, etc.) will be

addressed. A session on space policy considerations also will be included.

On Tuesday afternoon two sessions on the social amplification of risk plus a session on risk perceptions and another on risk analysis and society will examine the responses of the public when risks become recognized and the reactions of the risk analysts and managers to those responses. Three additional sessions will focus on risk analysis as it pertains to systems, cancer considerations, and technology.

### Tuesday Evening Banquet

At 7:30 PM Tuesday a banquet will be held, preceded by a 6:30 PM cash bar. The banquet speaker will be Gilbert White, University of Colorado, who will be presented the society's Distinguished Contribution Award (see story).

### Wednesday Sessions

Two sessions on Wednesday morning will deal with hazardous waste management and two will deal with the regulation of risks. In other sessions, the exposures of individuals to contaminated foods and harmful chemicals will be addressed, along with the uncertainties inherent in the modeling of such exposures.

The final sessions on Wednesday afternoon will focus on risk analysis in the nuclear age, a continuation of the consideration of individual exposures, and special issues. Also, one session will attempt to summarize the meeting with a discussion on "What Are Our National Priorities?"

### Wednesday Luncheon

At a Wednesday luncheon the attendees will hear Neil Frank, a Houston KHOU weatherman, speak on "Risk Stupidity." Before

### PROGRAM OPENER

*Special Panel Discussion:  
The Definition of Risk and  
Associated Terminology  
for Risk Analysis*

**When:** Sunday, 5-6 PM.

**Where:** Salon 10.

**Sponsor:** SRA Definitions Committee.

joining the Houston station, Frank was head of the National Hurricane Service in Florida.

### AIDS Session

The paper titles for the Monday morning session on "Scientific, Social, and Ethical Aspects of the AIDS Situation," unavailable for the preliminary program mailed in September, are as follows:

*Communicating the Risks of AIDS*, David McCallum, Institute for Health Policy Analysis, Georgetown University Medical Center.

*AIDS and Risk Analysis*, Vincent Covello, National Science Foundation.

*AIDS Epidemic: An Overview*, Mary-Lynne Johns, Lynne Associates for Immunological Education.

*All I Know Is What I Read in the Newspapers: The Media and AIDS*, Lynne M. Walters, University of Houston, Lynne Associates, and Forsythe and Butler Co., Inc.

### Space Travel Sessions

Former astronaut Joseph Kerwin, who is now a vice president of Lockheed Corporation, Houston, and Astronaut Charles Bolden (Col. of USMC), who is chief of the Safety Division at NASA's Johnson Space Center, will speak on the risks of space flight in a 8:30 AM session on Tuesday morning.

### CHAPTER MEETINGS

Business meetings will be held at the Wyndham Hotel on Tuesday, 5:30-6:30 PM, by the following chapters:

*Lone Star Chapter*, Salon 1.

*Metropolitan (CT-NJ-NY) Chapter*, Salon 2.

At an earlier session, 1:15 PM on Monday, past and present applications of risk analysis techniques for humans in space will be addressed. This session will include a report on the National Research Council's recent study of the Challenger accident.

### Defining "Risk"

In the program opener to be held in Salon 10 from 5 to 6 PM on Sunday afternoon, the SRA Committee on Definitions, chaired by Lawrence B. Gratt of IWG Corporation, San Diego, will strive to obtain a consensus from the membership on the definitions of some commonly used terms in risk analysis and management. Entitled "The Definition of Risk and Associated Terminology for Risk Analysis," the session will focus on a definition or definitions of the word "risk," with members of the committee giving short presentations and then entering into a panel discussion to be joined by the attendees.

After two years of work in which its members were themselves unable to arrive at a single definition of risk, the Definitions Committee decided that it would recognize that different definitions are in use among the disciplines involved in risk analysis and management. A discussion paper, available from the chairman, was subsequently prepared and will serve as the basis for the panel discussion.

As an example of the difficulties they are faced with, committee members cite the following definitions of risk they have been considering:

1. Possibility of loss, injury, disadvantage or destruction; to expose to hazard or danger; to incur risk or danger.
2. An expression of possible loss over a specific period of time or number of operational cycles.

3.  $\text{Consequence/unit time} = \text{Frequency (events/unit time)} \times \text{magnitude (consequence/event)}$ .
4. Measure of the probability and severity of adverse effects.
5. Conditional probability of an adverse event (given that the causative events necessary have occurred).
6. Potential for unwanted negative consequences of an event or activity.
7. Probability that a substance will produce harm under specified conditions.
8. Probability of loss or injury to people and property.
9. Potential for realization of unwanted, negative consequences to human life, health, or the environment.
10. Product for a probability of an adverse event time the consequences of that event were it to occur (dimensions of consequence  $\times$  time).
11. Function of two major factors: (a) probability that an event, or series of events of various magnitudes, will occur, and (b) the consequences of the event(s).
12. Probability distribution over all possible consequences of a specific cause which can have an adverse effect on human health, property or the environment.
13. Measure of the occurrence and severity of an adverse effect to health, property or the environment.

Current members of the Definitions Committee are Lee Abramson, Ed Crouch, Hatice Cullingford, Ed Lawless, Bob McGaughy, Elmer Offenbacher, Ian Ramsey, Jeff Roseman, Fritz Seiler, Bob Tardiff, and Chris Whipple. Samuel Morris is the committee's contact councilor.

### Meeting Organizers

Hosts for the 1987 meeting are members of SRA's Lone Star Chapter, with most of the organ-

izing committee located at Shell Oil Company in Houston. These include Donald E. Stevenson, general chairman; James J. Bonin, program chairman; R. G. Hansen, publicity chairman; and Stuart Cagen, program committeeman. Paul Deisler, retired from Shell Oil and currently president of SRA, has also served on the committee.

Others who have assisted with the program are Anna Fay Williams, University of Texas School of Public Health; Hatice Cullingford, National Aeronautics and Space Administration; Lynne M. Walters, University of Houston, Lynne Associates, and Forsythe and Butler Company; and Joseph Goldman, consultant in environmental and energy issues. Sue Burk of the SRA Secretariat has been in charge of arrangements.

As noted above, the Lone Star Chapter is also sponsoring Monday evening's special session on "Risk Analysis and Ethics." F. W. Weir, chairman of the Lone Star Chapter, will lead the session.

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### 1987-88 President

(cont. from page 1)

University, England. He has received numerous awards, including a Woodrow Wilson Fellowship and several government awards for outstanding service.

A pioneer in the fields of risk assessment, management, and communication, the new president has authored or edited over 17 books and numerous articles on these subjects, as well as chaired over 30 national and international conferences focusing on risk and related topics. He serves on the editorial boards of several journals and has been a visiting professor at Columbia University, the University of California, and the University of Southern California.

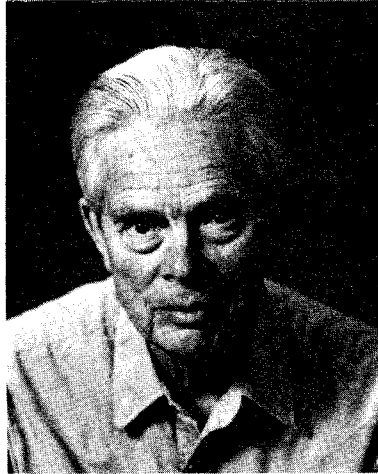
## Geographer Gilbert White Receives 1987 Distinguished Contribution Award

Gilbert F. White, Gustavson Distinguished Professor of Geography, Emeritus, at the University of Chicago since 1980 and an internationally recognized "senior statesman of resource and environmental research," will be presented the Society for Risk Analysis' 1987 Distinguished Contribution Award at the society's annual meeting in Houston, November 1-4.

Since writing his first professional paper in 1934, on the shortage of public water supplies in the United States, Gilbert White has so broadened his interests and activities that his identification as a geographer is adequate only in the broadest sense of the word. Earlier this year he received The Tyler Prize, the largest environmental award presented in America, at which time he was cited as a "world renowned geographer whose research has contributed to the understanding of interfaces between the natural and human environment." It was also pointed out that his colleagues call him the "father of flood plain management," managers being "key figures in mediating the environment-humanity relationship."

### Has Had Varied Career

Dr. White received his BS, MS and PhD degrees from the University of Chicago, where he was a professor of geography from 1956 to 1969, except for a one-year period during which he was a visiting professor at the University of Oxford. He joined the University of Colorado in 1970,



**Gilbert F. White**

serving as director of the Institute of Behavioral Science until 1978. From 1976 to 1984, he was also director of the Natural Hazards Research Applications and Information Center. Earlier, from 1946 to 1955, he was president of Haverford College. He had begun his career as a geographer with the Mississippi Valley Committee, National Resources Committee, and National Resources Planning Board, later joining the Bureau of the Budget (1940-42) and the American Friends Service Committee (1942-46).

Although a scholar, Dr. White is well known for making things happen. Among his other activities, The Tyler Prize citation points out that he helped UNESCO with arid zone research, chaired the U.N. Panel on Integrated River Development, consulted with a four-nation Lower Mekong River Coordinating Committee, advised the U.N. Development Programme on man-made lakes, consulted on the

water quality of the Nile River/Lake Nasser, and is continuing to serve as a member on the Advisory Committee on Greenhouse Gases of the World Meteorological Organization, the United Nations Environment Programme, and the International Council of Scientific Unions. He also continues to be active in SCOPE, the Scientific Committee on Problems of the Environment of the International Council of Scientific Unions (ICSU), having guided that organization as its third president from 1976 to 1982. In addition, he is chairman of the State of Nevada's Technical Review Panel on Socio-Economic Effects of Nuclear Waste Disposal.

### Work Widely Recognized

For his many contributions, Dr. White has received numerous awards, including the Distinguished Service Award of the Association of American Geographers in 1955 and again in 1974, and the United Nations Sasakawa International Environment Prize in 1985. He is also an honorary member of the Royal Geographical Society of London and of the Soviet Geographical Society.

### Foremost Educator

As an educator, Dr. White's interests have focused on all teaching levels. In 1967, he received the Quantrell Award for Excellence in Undergraduate Teaching (1967), while at the same time chairing the Steering Committee for the High School Geo-

## CALENDAR OF EVENTS

—December 1-2. RISK COMMUNICATION SYMPOSIUM, Congress Centre, Ottawa, Canada. Organized by Institute for Risk Research, University of Waterloo. Sponsored by Health and Welfare Canada; Agriculture Canada; Energy, Mines and Resources Canada; The Asbestos Institute; and the University of Waterloo. Symposium will be an open forum, focusing on the communication of health, environmental and technological risks in Canada. It will be oriented towards the analysts and risk regulators in government and industry, as well as members of the news media. Members of the public, the research community, and consultants are encouraged to attend so that discussions between representatives from all groups involved in the communication of risk can be held. Contact: Joan Higgs, Institute for Risk Research, University of Waterloo, Waterloo, Ontario, Canada, N2L 3G1 (Phone 519-885-1211; Ext. 6815 or 3355, Telex 069-55-259).

—December 7-9. 1987 ANNUAL ACT MEETING (American College of Toxicology), Sheraton Inner Harbor Hotel, Baltimore, Maryland. Contact: Alexandra Ventura, American College of Toxicology, 9650 Rockville Pike, Bethesda, MD 20814 (Phone 301-571-1840).

—February 15-19, 1988. INTERNATIONAL CONFERENCE ON MAN-MACHINE INTERFACE IN THE NUCLEAR INDUSTRY (Control and Instrumentation, Robotics and Artificial Intelligence), Tokyo, Japan. Organized by International Atomic Energy Agency in cooperation with OECD Nuclear Energy Agency and the Commission of the European Communities. (See June newsletter.) Contact: Secretariat IAEA-CN-49, International Atomic Energy Agency, PO Box 100, A-1400 Vienna, Austria (Telex 1-12645; cable address, INATOM VIENNA).

—March 22-25, 1988. SEVENTH SYMPOSIUM ON THE TRANSFER AND UTILIZATION OF PARTICULATE CONTROL TECHNOLOGY, Stouffer Nashville Hotel, Nashville, Tennessee. Sponsored by U.S. Environmental Protection Agency, Air and Energy Engineering Research Laboratory, Research Triangle Park, NC; and Electric Power Research Institute, Coal Combustion Systems Division, Palo

Alto, CA. Symposium intended to provide an opportunity for the exchange of information on particulate control technology with the goals of stimulating new ideas and aiding the diffusion of the technology among designers, users, and educators. Fabric filters and electrostatic precipitators will be the major topics. General registration: \$125. Contact: Claudia Runge, Electric Power Research Institute, PO Box 10412, Palo Alto, CA 94303.

—Spring, 1988. THIRD ANNUAL WORKSHOP OF INTERNATIONAL RESEARCH GROUP ON RISK COMMUNICATION (Location in United States to be announced). Contacts: Roger E. Kasperson, CENED, Clark University, Worcester, MA 01610, USA; Pieter-Jan Stallen, TNO, Department of Policy Studies, PO Box 541, 7300 AM Apeldoorn, The Netherlands.

—June 6-10, 1988. 1988 SYMPOSIUM FOR SOCIAL SCIENCE IN RESOURCE MANAGEMENT, University of Illinois, Urbana-Champaign. To bring together social scientists actively engaged in research pertaining to the management and use of natural resources. 100- to 150-word abstracts for posters and papers, and detailed proposals for panel discussions or thematic sessions requested by January 15, 1988. Send abstracts to: Joanne Vining, Institute for Environmental Studies, University of Illinois, 408 South Goodwin Ave., Urbana, IL 61801 (Phone 217-333-6145).

—July 5-8, 1988. 1988 MEETING OF INTERNATIONAL ASSOCIATION FOR IMPACT ASSESSMENT (IAIA), Griffith University, Brisbane, Australia. Theme: Integrating Impact Assessment in the Planning Process. 150-word abstracts for posters and papers and detailed proposals for panels, thematic sessions, round tables, or workshops requested by December 1, 1987 on following topics: (A) recent developments in environmental impact assessment methodology, (B) policy, legal and institutional changes, (C) applications and case studies, and (D) teaching, training and extension in the EIA field. Presentations eligible for publication in two proposed books and two journals. Send abstracts to: Rabel J. Burdge, IAIA '88, University of Illinois, Institute for Environmental Studies, 408 S. Goodwin Ave., Urbana, IL 61801 (Phone 217-333-2916).

graphy Project (1964-70). In nominating him for the SRA award, Awards Committee Chairman Paul Slovic stated that Dr. White had been an inspiration to his many students and colleagues, who have continued the directions of research that he originated.

In a demonstration of their esteem for Dr. White, two of his colleagues, Robert W. Kates and Ian Burton, edited two 400-page volumes reporting on his work (The University of Chicago Press,

1986). Both titled *Geography, Resources, and Environment*, Volume I presents selected writings of Dr. White and Volume II presents essays written by his colleagues on the many themes representing his work.

Finally, it is obvious from writings about Gilbert White that one of his admirers and colleagues has been his wife Anne, who collaborated with Kates and Burton on their work. Also, in The Tyler Prize citation, she was

mentioned as being instrumental, along with him, in influencing changes in the "provision of domestic water in developing countries." Quoting her, Kates and Burton say that she thinks he keeps working because of "his Quaker faith in the ability of humans to marshal their inner resources to deal competently and lovingly with the outer world and with their fellow human beings...and (his) humble desire to leave the world a bit better place than he found it."

## Journal Contents

The table of contents of Vol. 7, No. 4 of the SRA journal *Risk Analysis* is reprinted below.

### EDITORIAL

Barry Johnson, *Editorial: Risk Communication*

### LETTER TO THE EDITOR

Pieter Jan Stallen and Rob Coppock, *About Risk Communication and Risky Communication*

### ARTICLES

Dale Hattis, Linda Erdreich, and Mary Ballew, *Human Variability in Susceptibility to Toxic Chemicals: A Preliminary Analysis of Pharmacokinetic Data from Normal Volunteers*

Kenneth Bogen and Robert Spear, *Integrating Uncertainty and Inter-Individual Variability in Environmental Risk Assessment*

Christopher J. Portier and David Hoel, *Issues Concerning Estimation of the  $TD_{50}$*

Haluk Ozkaynak and George Thurston, *Associations Between 1980 U.S. Mortality Rates and Alternative Measures of Airborne Particle Concentration*

Theodor Sterling and James Weinkam, *Errors in Estimates of Smoking-Related Deaths Derived from Nonsmoker Mortality*

Josephine Mauskopf, *Projections of Cancer Risks Attributable to Future Exposure to Asbestos*

Fritz Seiler, Herbert Davis, John Kominsky, Richard Ronan, and Christopher Kwoka, *Use of Risk Assessment Methods in the Certification of Decontaminated Buildings*

D. C. Kocher, R. C. Ward, G. G. Killough, D. E. Dunning, Jr., B. B. Hicks, R. P. Hosker, Jr., J.-Y. Ku, and K. S. Rao, *Sensitivity and Uncertainty Studies of the CRAC2 Computer*

Fritz Seiler, *Error Propagation for Large Errors*

Harald Ibrekk and M. Granger Morgan, *Graphical Communication of Uncertain Quantities to Non-Technical People*

Stan Kaplan and Karl Fleming, *On the Use of the Cause Table in Handling Common Cause Events in System Analysis*

### SOFTWARE REVIEWS

Max Henrion, *Predict! Uncertainty Analysis in a Spreadsheet*

Blake Putney and Jim Koren, *CAFTA*

Geoffrey Jacquez, *Risk Analysis and Modeling for Age Structured Populations (RAMAS-7)*

### BOOK REVIEWS

Robin K. White

Manuscripts of articles for the journal should be submitted to: Curtis Travis, Editor, *Risk Analysis*, Bldg. 4500S, S204, Oak Ridge National Laboratory, PO Box X, Oak Ridge, TN, 37831.

### Beat the Drum Loudly!

*Concerned the SRA isn't being heard enough in the media? Worried that our message isn't getting through to other professionals? Now you can do something about it. The Publicity Committee needs a few good men and women with ideas, imagination and a bit of time. Help SRA grow commensurate with public interest in risk. It'll be worth your while. Phone or write: Herbert Inhaber, NUS Corporation, 910 Clopper Road, Gaithersburg, MD 20878 (Phone 301-258-2557).*

## Liaison Committee Expands Contacts

The number of professional societies with which the Society for Risk Analysis has interactions has increased to 20, with five additions to the 15 societies listed in the June newsletter. Committee chairman James D. Wilson, Monsanto Company, reports that three names were inadvertently omitted from the earlier list and that two more members have volunteered to serve as liaisons for two additional societies. The three societies not included in the June newsletter and the corresponding volunteers are:

**Association of American Geographers:** Allen White.

**Institute of Industrial Engineers:** Vance K. Wilkinson, Oak Ridge National Laboratory.

**Society of Toxicology:** David McFadden, Mead Corporation.

The two new societies and volunteers are:

**Health Physics Society:** William Mills, Oak Ridge National Laboratory.

**IEEE:** Kazuhiko Kawamura, Vanderbilt University.

In addition to the above, it should be noted that the society listed as The Information Management Society in the June newsletter should have been listed as the Institute of Management Science. Raymond Boykin, California State University, is the liaison for that society.



## SRA Officers Announced at Annual Meeting

The results of the recent SRA elections to choose society officers for the coming year will be announced at the business meeting to be held at 5:30 PM on Monday, November 2, during the SRA annual meeting at the Wyndham Hotel in Houston. The offices to be filled are president-elect, secretary, and council members (three). The office of treasurer will continue to be filled by Steven M. Swanson.

### President-elect: Buhl vs. Schwing

The candidates for president-elect (for president in 1988-89) are both engineers. Anthony (Tony) Buhl, vice president of International Technology Corporation, Oak Ridge, Tennessee, is a nuclear engineer who received his Ph.D. from the University of Tennessee in 1967. At IT, he manages the Risk Control Services Group, which mainly applies risk assessment technology to nuclear and chemical plant operations.

Richard C. Schwing is a chemical engineer who received his Ph.D. from the University of Michigan in 1963. Schwing is principal research engineer at General Motors Research Laboratories in Warren, Michigan, where he is primarily responsible for risk/benefit, cost/benefit, and cost/effectiveness research on policies that impact safety, noise pollution, air pollution, and fuel economy.

### Secretary: Boykin vs. Lynn

The candidates for secretary, which is a two-year office, are Raymond F. Boykin and Frances M. Lynn. Boykin has a Ph.D. in management science from St. Louis University (1987) and is currently an associate professor of management science at California State University, Chico, and a management scientist with Pickard, Lowe and Garrick, Inc. Lynn, at the University of North Carolina, Chapel Hill, is a research assistant professor in the Department of Environmental Sciences and Engineering and a research associate at the Institute for Environmental Studies. He received a Ph.D. in health policy and administration from the University of North Carolina in 1983.

### Three Council Positions

Three positions on the SRA Council are to be filled, each for three-year terms that will end in 1990. The candidates for the council seats are paired as follows:

Lee R. Abramson vs. George Apostolakis. Abramson, who has a Ph.D. in mathematical statistics from Columbia University, is with the Probabilistic Risk Assessment Branch of the Nuclear Regulatory Commission. Apostolakis, who has a Ph.D. in engineering science and applied mathematics from California Institute of Technology, Pasadena, is a professor of engineering and applied science at the University of California, Los Angeles.

W. Gary Flamm vs. Gordon W. Newell. Flamm received a Ph.D. in medical biochemistry in 1962 from the University of Cincinnati and is currently director of the Office of Toxicological Sciences of the Public Health Service. Newell has a Ph.D. in biochemistry from the University of Wisconsin (1948); he is senior program manager for health studies in the Risk and Health Science Department of the Electric Power Research Institute in Palo Alto, California.

Milton Russell vs. Richard Wilson. Russell, who has a Ph.D. in economics from the University of Oklahoma (1963), is currently a professor of economics at the University of Tennessee and a senior economist at Oak Ridge National Laboratory. Wilson, Mallinckrodt Professor of Physics at Harvard University, received his Ph.D. from Oxford University in England.



**NOTE:** *Risk newsletter* is published quarterly: in March, June, September, and December. All contributions to the newsletter should be received by the editor by the fifteenth day of the month preceding the month of publication. That is, the deadline for contributions to the September newsletter is August 15, and deadlines for the December, March, and June newsletters will be November 15, February 15, and May 15, respectively.

## Chapter News

### SRA Gains Three New Chapters

At the July meeting of the SRA Executive Committee, three additional chapters were given official status, increasing the total number of chapters in the United States to eight. The three new chapters are:

#### Metropolitan (CT-NJ-NY) Chapter

After the SRA Executive Committee and petitioners for the new chapter agreed that its region would cover the three states of Connecticut, New Jersey, and New York, the Metropolitan (CT-NJ-NY) Chapter received official status within the society. Elections for the chapter have been completed with the following results:

President: Rae Zimmerman, New York University.

President-Elect: Peter Hoefler, Case University.

Secretary: Elmer Offenbacher, Temple University.

Treasurer: Vihn Cam, Regional 2 Office, U.S. Environmental Protection Agency.

Councilors: Richard Dime, New Jersey Department of Environmental Protection; David Lipsky, Dynamac Corporation; and Paul Moskowitz, Brookhaven National Laboratory.

#### Research Triangle Chapter

The Research Triangle Chapter in North Carolina was also officially recognized by the SRA Executive Committee in July. The chapter has been active since its organizational meeting on December 8, 1986, having held several meetings and conducted elections. The president of the chapter is Harvey Richmond, U.S. Environmental Protection Agency. The full slate of officers was announced in the June issue of this newsletter.

#### Southern California Chapter

The third chapter to be accepted into the society at the July meeting of the SRA Executive Committee was the Southern California Chapter.

It had its first meeting on April 27 and since then has elected a full slate of officers. The president of the chapter is George Apostolakis, University of California, Los Angeles, the full slate of officers also having been announced in June.

### Northern California Chapter Meetings Scheduled

The Northern California Chapter of SRA will hear Lester Lave, a professor of economics and public policy at Carnegie-Mellon University and 1986-87 president of the Society for Risk Analysis, speak on "Accounting for Uncertainty in Risk Analysis" on October 8 at Shenanigans Restaurant, Jack London Village, Oakland. A January 12 meeting (at a place on the San Francisco Peninsula to be announced) will feature Chauncey Starr of the Electric Power Research Institute, who will speak on "The Philosophy of Risk Analysis."

The chapter is currently holding elections to select officers to serve with incoming President Elisabeth Paté-Cornell of Stanford University. The candidates for president-elect are Joyce McCann, ICF/Clement, and Chris Whipple, Electric Power Research Institute; for treasurer, Deborah Amaral, Decision Focus, Inc. and M. W. (Lee) Merkhofer, Applied Decision Analysis, Inc.; and for councilor, Abraham Silvers, EPRI, and Robert Spear, School of Public Health, University of California, Berkeley. Jeffrey Daniels, Lawrence Livermore National Laboratory, is serving a two-year term as secretary, and John Urquhart, Apex Corporation, will continue on the council.

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**EDITOR'S NOTE:** In response to an invitation by Risk newsletter, three risk centers submitted information about their work. These centers will be featured in future issues of the newsletter.

Chapters are reminded that they should submit news on their activities to the newsletter on a regular basis.

## Risk Communication Group Meets in Utrecht, Holland

The International Research Group on Risk Communication held its second annual international workshop in Utrecht, Holland, June 10-12. Attendees included Michael Baram, Boston University; George Cvetkovich, Western Washington University; Jose van Eijndhoven, University of Utrecht; Roger Kasper, Clark University; Gideon Keren, Netherlands Organization for Applied Scientific Research; Douglas MacLean, University of Maryland; Granger Morgan, Carnegie-Mellon University; Joop van der Pligt, Free University, Amsterdam; Arie Rip, University of Amsterdam; and Pieter-Jan Stallen, Netherlands Organization for Applied Scientific Research.

The meeting included presentations and discussions of current research on risk communication, with frequent focusing on specific topics (e.g., radiation, biotechnology). The results of the workshop will form the core of a planned book on international perspectives in risk communication research.

## Comings & Goings

**Branden B. Johnson** will be in charge of risk communication research for the new Environmental Health Risk Assessment Program in the Office of Science and Research, New Jersey Department of Environmental Protection. Among his duties, beginning in November, will be oversight of an \$80,000 career development award from the National Science Foundation's Risk Assessment Program. He is presently assistant professor of Science, Technology, and Society at Michigan Technological University.

## Awards

Seven students in Worcester Polytechnic Institute's master's degree program in fire protection engineering have been inducted into the Salamander Honorary Fire Protection Society, a distinctly high honor in the fire protection engineering profession. The recent inductees are **Hamid Bahadori, Douglas Beller, Douglas Blanchard, Mansour Alipour Fard, Casey Grant, Wayne D. Moore, and Philip D. Sherman.**

## Positions Available

### Postdoctoral Fellowship in Hazardous Waste Policy:

The University of Michigan, Ann Arbor, has a two-year postdoctoral position open for a qualified individual interested in decision making under uncertainty. This individual will concentrate upon the development of frameworks for decision making regarding the identification and selection of cost-effective means for the prevention and remediation of environmental contamination resulting from toxic and other hazardous wastes. The position is one of seven sponsored by the Michigan Universities Hazardous Waste Consortium. Individuals with training in natural resources, economics, engineering, public policy, or other relevant fields should send a resume and three letters of recommendation immediately to: James E. Crowfoot, Dean, School of Natural Resources, The University of Michigan, Ann Arbor, Michigan, 48109-1115 (Phone 313-764-2440). (Note: The University of Michigan is an affirmative action/equal opportunity employer.)

**Postdoctoral Position in Risk Communication and Management.** Carnegie Mellon University, Pittsburgh, has a postdoctoral position open on a research team pursuing experimental studies in risk communication and public understanding. Familiarity with the literature in risk perception is required. Background in experimental psychology and/or experience in radon, solar UV, dam safety, 60-Hz fields, auto safety, carcinogenic chemicals or similar technical risks is preferred. Send resume and selected papers to: M. Granger Morgan, Head, Department of Engineering and Public Policy, Carnegie Mellon University, Pittsburgh, PA, 15213.

**Postdoctoral Fellowship or Research Associate Position in Risk Communication and Responses.** Rutgers University has one full-time position available for an applicant with a PhD to collaborate in research on risk perception, risk communication, and responses to environmental hazards. Social science research experience (field or survey research experience preferred), writing skills, and computer familiarity required. Salary: \$16,000, starting fall 1987; second year possible. Contact: Neil Weinstein, Department of Human Ecology, Cook College, Rutgers University, PO Box 231, New Brunswick, New Jersey 08903 (Phone 201-932-9169).

## Corporate Contributor

**Resources for the Future**, Washington, DC, is welcomed as the newest corporate contributor to the Society for Risk Analysis. Corporate contributors are those companies or organizations that contribute \$500 or more to SRA or sponsor specific projects at the society's annual meetings.



RISK newsletter  
is published by  
The Society for  
Risk Analysis.

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*Society Secretariat:* Richard J. Burk, Jr., *Executive Secretary*, Society for Risk Analysis, 8000 Westpark Drive, Suite 400, McLean, VA, 22101. (Phone: 703-790-1745).

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FROM THE EDITOR'S DESK . . .

## Thanks to Lester! Welcome to Paul!

One of the questionable privileges associated with being elected president of the Society for Risk Analysis is that it is understood (at least by me) that the outgoing president will assume the responsibilities of chairman of the Publications Committee and therefore become the advisor to the editor of the newsletter. Lester B. Lave has ably filled that position this past year, but now for some reason is willing (anxious?) to hand it over to another. It is with great pleasure that I look forward to working with Paul Deisler as next year's Publications Committee chairman. As anyone who knows him can testify, he takes all his responsibilities seriously, and I expect him to have several recommendations for improvement of the newsletter.

I also look forward to at last meeting Lester and Paul in person at the SRA annual meeting in Houston, as it is my plan to be there. I also hope to meet a number of other SRA members with whom I have become acquainted on the telephone. I am making my list, so make sure that you are there, too.

—Lorraine S. Abbott

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