

RISK *newsletter*

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AGENDA REVISED FOR SRA JUNE 17-18 ANNUAL MEETING

Technical Session to Feature Panel Discussion on Current Use of Risk Analysis

Instead of the minisymposium announced in the last newsletter, the June 18 technical session of the 1982 Annual Meeting of the Society for Risk Analysis will feature a panel discussion on the subject "Risk Analysis: Everybody's Talking About It But Is Anybody Using It?" The session will begin at 9 AM in Regency Rooms A and B at the Hyatt Regency Hotel, Arlington, Virginia. The moderator for the session will be Robert B. Cumming, SRA president, and the rapporteur will be Richard Wilson, Harvard University.

A Word of Explanation

March 25, 1982

Dr. Vincent Covello
Chairman
Publications Committee
Society for Risk Analysis

Dear Dr. Covello:

On behalf of the management of Plenum Publishing Corporation, I sincerely apologize for the inadvertent clerical error that delayed the mailing of Volume 1, Issue 2 of *Risk Analysis* to members of the Society.

Please note that this issue, which was published on February 25, 1982, will be sent from our office by first class mail between March 30 and April 2. Volume 1, Issue 3 will be mailed approximately April 20.

Thank you for your patience and understanding in this matter.

Very truly yours,
Alan Harris
Controller/Fulfillment Director
Plenum Publishing Corporation

The panel discussion will focus on the impact of risk assessments to date. The motivations for undertaking major risk assessments will be discussed, and actual decisions that have been partly or wholly based on risk assessment will be identified. An examination of subsequent events will attempt to determine how effectively risk assessments have fulfilled the needs of the decision makers. Finally, the panel will address whether risk assessment alone is sufficient for decision making or whether additional information is needed.

The theme of the panel discussion will be introduced by Professor Arthur A. Atkisson in a paper entitled "A Perspective on the Use and Usefulness of Risk Assessments." Professor Atkisson, Chairman of the Department of Environmental Administration at The University of Wisconsin, Green Bay, is completing a major study entitled "An Integrated Analysis of Risk Assessment Methodologies and Their Employment in Government Risk Management Decision-Making" under a grant from the National Science Foundation. Among his earlier studies on risk analysis, Professor Atkisson has performed a major assessment of risk analysis for natural hazards.

The panelists, assembled from several disciplines, will come to the discussion with concerns about risks in various areas, such as the environment, occupational safety, consumer products, nuclear power operation, food and drugs,

(continued on page 2)

THREE-DAY LP/HC WORKSHOP TO INCLUDE APPROXIMATELY 70 PAPERS

Attendees of the Workshop on Low-Probability/High-Consequence Risk Analysis, to be held at the Hyatt Regency Hotel in Arlington, Virginia, June 15-17, will have the opportunity to hear approximately 30 papers presented in technical sessions during the three-day period. In addition, 40 poster papers will be presented on June 15-16, with the authors available for questions during lunch and following the afternoon sessions.

As noted in the last newsletter, the LP/HC Workshop will examine the development of the methodology for analyzing LP/HC events and the results of research aimed at understanding such events. In addition to the Society on Risk Analysis, sponsors for the Workshop are the Nuclear Regulatory Commission, the Department

of Energy, and the Environmental Protection Agency.

In the opening session of the Workshop, overviews of LP/HP issues and problems will be presented by representatives of NRC, DOE, and EPA. The conference will be concluded with a panel made up of the chairmen of the various sessions.

Vincent Covello, National Science Foundation, and Ray Waller, Los Alamos Scientific Laboratory, are co-chairmen for the Workshop. Members of the organizing committee are Lee Abramson, James Johnson, Les Lancaster, P. K. Niyogi, Maurice Bryson, Harry Martz, Gio B. Gori, Robert Cumming, George Flanagan, V. R. R. Uppuluri, N. Barr, E. Anderson, and W. Vesely.

1982 ANNUAL MEETING (cont. from page 1)

and Industrial and government decisions. They include Elizabeth L. Anderson, Director, Office of Health and Environmental Assessment, U.S. Environmental Protection Agency, Washington D.C.; Paul Deisler, Senior Vice President, Shell Oil Company, Houston, TX; Peter B. Hutt, attorney and former counsel for the Food and Drug Administration, now with Covington & Burling, Washington, D.C.; Lester Lave, risk analyst and senior fellow, The Brookings Institution, Washington, D.C.; Don Ritter, congressman (R, PA); Anthony Robbins, former Director of National Institute of Occupational Safety and Health, now a staff member of the Committee on Energy and Commerce, U.S. House of Representatives; R. David Pittle, Commissioner, U.S. Consumer Products Safety Commission, Washington, D.C.; and Forest Remick, Director, Office of Policy Evaluation, U.S. Nuclear Regulatory Commission, Washington, D.C.

The panel discussion has been organized by Gio B. Gori, Franklin Institute, and Joseph R. Penland, Science Applications, Inc., co-chairmen for the annual meeting.

Under the revised agenda, the poster presentations at the SRA annual meeting will be on June 18 rather than on the evening of June 17 (see Call for Papers, this newsletter). Authors will be available during the technical session breaks.

CALL FOR PAPERS

POSTER PRESENTATIONS ON JUNE 18

at
SRA 1982 ANNUAL MEETING
Hyatt Regency, Arlington, Virginia

Abstracts for poster papers will be accepted through May 31. Each abstract should include:

- Objectives of work
- Methodology used
- Results
- Significance of results

Send double-spaced one-page abstract, with author's name, affiliation, address, and telephone number, to:

Dr. Robert B. Cumming, President
Society for Risk Analysis
P. O. Box 531
Oak Ridge, TN, USA 37830

NOTICE

All SRA members invited to June 17 Business Meeting, 4:30 p.m.

The second annual meeting of SRA will begin with a business meeting which will convene at 4:30 PM Thursday, June 17, in Regency Rooms A

and B. In addition to other business, the 1982 election results will be announced. The business meeting will be followed by a mixer.

NRC RELEASES DISCUSSION PAPER ON SAFETY GOALS

In response to recommendations of the President's Commission on the Accident at Three Mile Island, the Nuclear Regulatory Commission has been developing an explicit policy statement on nuclear power plant safety philosophy. In a recently released discussion paper (NUREG-0880), NRC proposes that the statement focus on accidents which may release radioactive materials into the environment and that the policy be expressed in terms of qualitative goals complemented by several numerical guidelines.

The qualitative safety goals are:

(1) Individual members of the public should be provided a level of protection from the consequences of nuclear power plant accidents such that no individual bears a significant additional risk to life and health.

(2) Societal risks to life and health from nuclear power plant accidents should be as low as reasonably achievable and should be comparable to or less than the risks of generating electricity by viable competing technologies.

The primary numerical guidelines relate to prompt and delayed mortality risks, the latter being attributed to induced cancer. Prompt fatalities "should not exceed 0.1% of the sum of early fatality risks resulting from other accidents to which members of the U.S. population are generally exposed." Similarly, cancer fatalities "should not exceed 0.1% of the sum of cancer fatality risks resulting from all other causes."

Two secondary guidelines are also proposed. One states that the "benefit of an incremental reduction of risk below the numerical guidelines for societal mortality risks should be compared with the associated costs on the basis of \$1,000 per man-rem averted." The other states that the "likelihood of a nuclear reactor accident that results in a large-scale core melt should normally be less than one in 10,000 per year of reactor operation."

NOTE: Copies of NUREG-0880 are available from: NRC-GPO Sales Program, Attn. Sales Mgr., Division of Technical Information and Document Control, US-NRC, Washington D.C. 20555, Phone 301/492-9530..... Comments on the statement should be sent by May 18, 1982, to: Secretary of the Commission, US Nuclear Regulatory Commission, Washington, D.C. 20555.

NOTE: The proceedings for the 1981 workshop held at the National Academy of Sciences are in the hands of the publisher and hopefully will be available at our June, 1982, meeting. The cost of the proceedings has not yet been determined. As noted in the last newsletter, participants in the meeting will receive free copies.

FIRST SRA LOCAL CHAPTER ORGANIZING IN WASHINGTON AREA

An ad hoc committee appointed by Society President Robert B. Cumming met on March 24 to evaluate the feasibility of establishing a local SRA chapter in the Washington, D.C. area. Deciding that a need for the chapter existed, the committee stated that its broad objectives should be to promote the science and practice of risk analysis and to improve communications among practitioners and users of risk analysis in various segments of the Society in the Washington area. The local chapter would also organize seminars and host meetings of the national society held in the Washington area.

A provisional set of officers was named as follows: President, A. Alan Moghissi, Environmental Protection Agency; Vice President, Daniel Byrd II, American Petroleum Institute; Secretary, Janice Longstreth, Dynamac Corporation; and Treasurer, Lee Abrahamson, Nuclear Regulatory Commission. Vincent Covello, National Science Foundation, will be liaison with the national society.

All interested persons are invited to attend a chapter organizational meeting that will be held on Friday, June 18, immediately following the conclusion of the national meeting of the Society. Topics for discussion will be: objectives of chapter; election of officers; and 1982-1983 program. The annual dues will be \$5. For further information, write: Washington Area Chapter, Society for Risk Analysis, 4720 Montgomery Lane, Suite 506, Bethesda, Maryland, 20814.

RELATIONSHIP OF LOCAL SECTIONS TO NATIONAL SOCIETY UNDER STUDY

The provisional set of officers named to establish SRA's first local section also has the responsibility as a committee to recommend procedures for establishing other local sections. The committee is to report to the SRA Council on how they think local sections should relate to the larger Society and what guidelines and/or requirements should be specified for the local sections.

SASC SELECTED TO MANAGE SRA

The SRA Council has reached an agreement with Society & Association Services Corporation whereby SASC will provide administrative services for SRA. The president of SASC is Richard J. Burk, Jr., and the offices are located at 4720 Montgomery Lane, Bethesda, MD, 20814 (Phone 301-654-3080). SASC provides similar services for several other technical societies, including the Health Physics Society.

RISK ASSESSMENT AND PSYCHOLOGICAL STRESS

A little-publicized federal court decision may have major implications for risk assessment. On January 7, 1982, the U.S. Court of Appeals for the District of Columbia upheld a petition by People Against Nuclear Energy (PANE) calling for the Nuclear Regulatory Commission to consider the impact of psychological stress when deciding whether to restart the undamaged reactor (TMI-1) at Three Mile Island. In response to the court decision, NRC has begun preparing an environmental assessment of the effects of a proposed TMI-1 restart on the psychological health of the residents and on the well-being of the communities in the TMI vicinity.

The first step in preparing such an assessment was to ascertain the state-of-the-knowledge of psychological stress to determine the extent to which stress associated with a restart of TMI-1 can be predicted. Accordingly, the MITRE Corporation, at the request of the NRC, invited 11 experts in the field of psychological stress to share their knowledge in a workshop conducted on February 4-5. In particular, they were asked to present their professional judgments, hypotheses, research methods, and study results while addressing the following questions:

--What can we infer or extrapolate from existing concepts and studies concerning the psychological responses that will be exhibited among the TMI population as a result of a TMI-1 restart?

--What is the scientific basis for predicting the types and ranges of these psychological stress responses?

--What additional near-term efforts are required to increase the confidence in these predictions?

A report of the workshop is currently being prepared by MITRE and will be available from NRC.

LOGO IDEAS STILL NEEDED

In response to a request in the last newsletter for SRA logo ideas, James A. Frazier of the National Research Council proposed a logo based on the Egyptian symbol for life (ANKH) with a serpent entwined around it. Admitting that it was a takeoff on the medical symbol using the serpent and the staff, he felt that the risk to life could be seen in the two elements.

Only this one proposal has been mailed to the newsletter. If you have a logo idea you would like the SRA Council to consider, please mail it to: Dr. George F. Flanagan, Editor, Risk newsletter, Building 6025, Oak Ridge National Laboratory, PO Box X, Oak Ridge, TN, 37830.

MEMBERSHIP APPLICATION ENCLOSED, RENEWAL NOTICES MAILED

Since the last newsletter, SRA's membership has increased from approximately 600 members to 786 members. We once again include a membership form in the newsletter so that you may invite others to join.

Notices for renewal of membership in the Society are being mailed during April. All persons who paid their 1981 dues (those paying before December 31, 1981) are considered to be charter members of SRA and will be expected to now pay 1982 dues. Dues paid after January 1, 1982, are considered to be 1982 dues. The dues should be mailed to: Dr. V. R. R. Uppuluri, Treasurer, The Society for Risk Analysis, PO Box 531, Oak Ridge, TN, 37830, USA.

ELECTION BALLOTS MAILED, RETURN IMMEDIATELY

Ballots for the election of the president-elect (the 1983 president) and three three-year positions on the SRA Council are being mailed to the membership during April. The ballots should be returned immediately since the results are to be announced at the June 17 business meeting of the Society.

Retiring officers of the Society are President Robert B. Cumming, Oak Ridge National Laboratory, and three Council members: Elizabeth L. Anderson, US Environmental Protection Agency; Joseph V. Rodricks, Clement Associates, Washington, DC; and Paul Slovic, Decision Research, Eugene, Ore. Dr. Anderson chaired the Nominating Committee just completing its work.

NSF RISK ANALYSIS GRANTS AWARDED

From January 1 - March 30, the National Science Foundation Risk Analysis Program made four new awards as follows:

---"Risk/Benefit Perceptions of Risk Assessment." Principal Investigators: Paul Slovic and Sarah Lichtenstein, Decision Research, Inc.

---"Federal Judicial Review of Agency Risk Reduction Standards." Principal Investigator: Arthur Oleinick, University of Michigan.

---"Managing Health and Safety Risks." Principal Investigator: Lester Lave, Brookings Institution.

---"Risk Assessment, Incremental Decision Making, and the 'New' Environmental Problems." Principal Investigators: Talbot Page, John Ferejohn, California Institute of Technology.

JOURNAL ISSUES CATCHING UP

As noted on the front page of this newsletter, Issue 2 of Volume 1 of the SRA journal was published in February and Issue 3 should be published by the end of April. Issue 4, which will complete Volume 1, is expected to be published about May 20. The contents of Issues 2-4 were printed in the last issue of the newsletter.

Papers already accepted will fill the four issues of Volume 2. The contents of Issue 1 of Volume 2, which should be available by July 1, are as follows:

Author(s)	Title
<i>Editorial</i>	
Robert B. Cumming	<i>Editorial: A Question of Scale</i>
<i>ARTICLES</i>	
Joseph Fiksel Donald B. Rosenfield	Probabilistic Models for Risk Assessment
Stanley Kaplan	A Matrix Theory Formalism for Event Tree Analysis--Application to Nuclear Risk Analysis
John R. Totter	Some Problems in Determining Risks from Cancer
John H. Farmer Ralph L. Kodell David W. Gaylor	Estimation and Interpolation of Tumor Probabilities from a Mouse Bioassay with Survival/Sacrifices Components
William W. May	\$s for Lives: Ethical Considerations in the Use of Cost/Benefit Analysis by For-Profit Firms

SRA COUNCIL HOLDS MEETING

In conjunction with a conference on probabilistic risk assessment held in Arlington, VA, April 4-7, the SRA Council held a meeting at the Sheraton National Hotel, Arlington, on the afternoon and evening of April 7 to conduct regular business and to meet the new Society "secretariat," Mr. Richard J. Burk (see story on SASC). In addition to Council members, the meeting was attended by several representatives of the Advisory Board and SRA committee chairmen.

Among other business, the Council changed the name of the Peer Review Committee to the Committee on Special Projects. Chaired by Robert W. Hockenbury, Rensselaer Polytechnic Institute, NY, this committee has the responsibility for exploring new technical work that the Society might be willing to undertake, for example, work for regulatory agencies. No such work has been initiated yet, but it has been suggested both by members of SRA and others that the Society itself should be involved in risk studies, especially in reviews of risk studies.

Members of the Special Projects Committee are Joe Fragola, Science Applications, Inc.; Robert Tardiff, National Academy of Sciences, Washington, D.C.; and Detlof von Winterfeldt, University of Southern California.

HELP UPDATE OUR MAILING LISTS!

Please help The Society for Risk Analysis ensure that it has correct mailing addresses. Fill in and return the form shown below if (1) you are a nonmember wishing to continue receiving this newsletter, (2) you are a member whose address on the newsletter is incorrect, or (3) you wish to add an address to our list. To return form, cut out, fold and staple so that address at left shows.

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P. O. Box 531
Oak Ridge, TN 37830

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CALENDAR OF EVENTS

--WORLD'S FAIR (Theme: ENERGY TURNS THE WORLD)
-- May 1 - October 31, 1982, Knoxville, Tennessee.

--FOURTH ENERGY MODELING SYMPOSIUM: PLANNING FOR ENERGY DISRUPTIONS -- May 10-12, 1982, Washington, D.C. Sponsored by the Institute of Gas Technology. Will emphasize planning for fluctuations and disruptions in supply and price of energy. Write or call Program Chairman Fred S. Roberts, Professor of Mathematics, Dept. of Mathematics, Rutgers University, New Brunswick, NJ, 08903, phone 201/932-2365.

--INTERNATIONAL SYMPOSIUM ON RODENT LIVER NODULES: SIGNIFICANCE TO HUMAN CANCER RISK? - May 10-12, 1982, Reston, Virginia. Sponsored by Society of Toxicologic Pathologists. Write B. E. McKenzie, Ortho Pharmaceutical Corp., Raritan, NJ, 08869.

--WORKSHOP ON LOW PROBABILITY/HIGH CONSEQUENCE RISK ANALYSIS - June 15-17, 1982, Hyatt Regency, Arlington, Virginia. Sponsored by Society for Risk Analysis, Nuclear Regulatory Commission, Department of Energy, and the Environmental Protection Agency.

--USES OF RISK ANALYSIS; SECOND ANNUAL MEETING OF THE SOCIETY FOR RISK ANALYSIS - June 17-18, 1982, Hyatt Regency, Arlington, Virginia.

--SPECIAL SESSION ON ENVIRONMENTAL AND SAFETY RISK MANAGEMENT - July 12-16, 1982, Massachusetts Institute of Technology. An integrated presentation of perceptions of risk and alternative interpretations of risk data; methodologies for risk assessment and management; techniques (including insurance, regulation and litigation) used by society to cope with risks; the legal, institutional and political frameworks within which risk management occurs; and case studies of risk analysis and management efforts. Professors A. W. Drake and T. R. I. Greenwood. To obtain brochure, write Director of the Summer Session, Room E19-356, M.I.T., Cambridge, MA, 02139.

--3rd INTERNATIONAL SYMPOSIUM ON CHLORINATED DIOXINS AND RELATED COMPOUNDS - October 12-14, 1982, International Congress Centre (Kongresshaus), Salzburg, Austria. Organized by International Association of Environmental Analytical Chemistry and The International Society of Toxicological and Environmental Chemists. 200-word abstracts of poster presentations may be submitted before June 15 to: Prof. Dr. O. Hutzinger, University of Amsterdam, Nieuwe Achtergracht 166, 1018 WV Amsterdam, The Netherlands. U.S. contacts: Dr. Barclay M. Shepard and Dr. Alvin L. Young, Veterans Administration, Washington, D.C.; and Dr. Richard E. Tucker, Enviro Control, Washington, D.C.

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George F. Flanagan, *Editor*
Lorraine S. Abbott, *Associate Editor*

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