

93
A5
1989



The 1989 Annual Report
of the
DISASTER RESEARCH CENTER
University of Delaware
Newark, Delaware USA, 19716

DRC LIBRARY
University of Delaware

DRC Personnel

Faculty:

1. Russell R. Dynes, Co-Director
2. E. L. Quarantelli, Director
3. Kathleen Tierney, Research Director (from 7/1/89)
4. Dennis Wenger, Co-Director (to 1/30/89)

Visiting Faculty:

1. Shunkicki Kosaka (Tokyo Metropolitan University, Japan)

Office Coordinator:

1. Marjorie Simmons

Research Assistants:

Cynthia Arocoraci
Robin Christensen
Bruce Crawford (Computer Service Coordinator)
James Dahlhamer
Elaine Denning
Michael Hackett
Keith Hughes
Jinfang Li
Catherine Simile

Staff:

Luisa Araryo
Jeanne Burns (Research Collection Coordinator)
Howard Cohen
Linda Conley
John Davidson
Jill Herzog
Mary Ann Hughes (Special Projects Coordinator)
Randy Jones
Susan Knight
Cynthia Olson
Rosa Saez (Translator)
Melissa Sappington
Hi Li Yi
Song Ying

1. Contracts and Grants:

(1) Disaster analysis: Emergency medical services. \$310,134. Federal Emergency Management Agency contract. 9/30/85-12/31/89.

(2) Preparedness and response of lifeline organizations in community disasters. \$248,473. National Science Foundation grant. 6/1/88-11/30/90.

(3) Local earthquake mitigation and preparedness planning in China and the United States. \$245,584. National Science Foundation grant. 7/1/89-6/30/92.

2. Publications:

A total of 24 publications were produced or published by DRC during the year.

Books.

E. L. Quarantelli and Carlo Pelanda (eds.) Proceedings of the Italy-United States Seminar on Preparations for, Responses to, Recovery from Major Community Disasters. Book & Monograph Series #22. Newark, DE.: Disaster Research Center, University of Delaware.

Reports.

Dennis Wenger and E. L. Quarantelli. Local Mass Media Operations, Problems and Products in Disasters. Report Series #19. Newark, DE.: Disaster Research Center, University of Delaware.

Articles and Chapters in Books.

Articles and Chapters in Books.

Russell Dynes. "Cross-cultural International Research: Sociology and Disaster." International Journal of Mass Emergencies and Disasters 6:101-129.

E. L. Quarantelli. "The NORC Research on the Arkansas Tornado: A Fountainhead Study." International Journal of Mass Emergencies and Disasters 6: 283-310.

E. L. Quarantelli. "The Social Science Study of Disasters and Mass Communication." Pp. 1-19 in Walters, Wilkins and Walters (eds.) Bad Tidings: Communication and Catastrophe. Hillsdale, NJ: Lawrence Erlbaum Associates.

Dennis Wenger. "The Role of Archives for Comparative Studies of Social Structure and Disaster." Pp. 238-250 in Kreps (ed.) Social Structure and Disaster. Newark, DE.: University of Delaware Press.

E. L. Quarantelli. "Disaster Education: It's Substantive Content and Target Audience." Pp. 1-19 in Post Congress Record of Proceedings Emergency '88. London, Great Britain: Institute of Civil Defense.

E. L. Quarantelli. "Characteristics of Citizen Groups Which Emerge With Respect to Hazardous Waste Sites." Pp. 177-195 in Peck (ed.) Psychological Effects of Hazardous Toxic Waste Disposal on Communities. Springfield, IL.: Charles C. Thomas.

Russell Dynes. "Communications Within Organizations." Pp. 43-45 in Selected Proceedings of the Emergency Preparedness Canada Symposium '88. Ottawa, Canada: Emergency Preparedness Canada.

E. L. Quarantelli. "Planning and Management for the Prevention and Mitigation of Natural Disaster Especially in a Metropolitan Context: Initial Questions and Issues Which Need to be Addressed." Pp. 1-20 in Planning for Crisis Relief Volume 3. Nagoya, Japan: United Nations Centre for Regional Development.

Kathleen Tierney and E. L. Quarantelli. "Needed Innovation in the Delivery of Emergency Medical Services in Disasters: Present and Future." Disaster Management 2: 70-76.

Russell Dynes. "Editors Introduction to Issue on Disaster Classics." International Journal of Mass Emergencies and Disasters 6: 1-3.

Miscellaneous Reports

E. L. Quarantelli. Disaster Recovery: Comments on the Literature and a Mostly Annotated Bibliography. Report # 44. Newark, DE.: Disaster Research Center, University of Delaware.

Final Project Reports

Dennis Wenger, E. L. Quarantelli and Russell R. Dynes. Disaster Analysis: Police and Fire Departments. Report # 37. Newark, DE.: Disaster Research Center, University of Delaware.

Preliminary Papers (intended for later publication)

Kenneth Green, David Neal and E. L. Quarantelli. The relationship of disaster-related emergent citizen groups to other organizations.

E. L. Quarantelli. Human behavior in the Mexico City earthquake: Some implications from basic themes in survey findings.

E. L. Quarantelli. How individuals and groups react during disasters: Planning and managing implications for EMS delivery.

E. L. Quarantelli. Disasters and EMS delivery in the next century.

Russell R. Dynes and E. L. Quarantelli. Reconstruction in the content of recovery: Thoughts on the Alaskan earthquake.

E. L. Quarantelli. Disaster assistance and socioeconomic recovery: Some observations.

E. L. Quarantelli and Dennis Wenger. A cross-societal comparison of disaster news reporting in Japan and the United States.

Working Papers

Russell R. Dynes. Conceptualizing disasters in ways productive for social science research.

E. L. Quarantelli. Planning for transportation accidents involving hazardous materials.

E. L. Quarantelli. Emergency: A review article.

3. Presentations

DRC personnel made 25 formal presentations at the following:

- Earthquake Engineering Research Institute Annual Meeting, San Francisco, February 9.
- Interdisciplinary Natural Resources Program, Asian Institute of Technology, Bangkok, Thailand, February 15.
- Medical Planning and Radiation Accidents, REACTS, Oak Ridge, Tennessee, March 8.
- Seminar on Research in Socio-Economic Aspects of Disasters in the Asian-Pacific Region, Asian Disaster Preparedness Center, Thailand, Bangkok, March 10.
- ACM/SIGUCCS Computing Center Management Symposium, St. Louis, Missouri, March 16.
- Seminar on Refugee Issues, Webster College, Geneva, Switzerland, March 28.
- Methodological Issues in Warning Research Seminar, Philippine Atmospheric, Geophysical and Astronomical Services, Quezon City, Philippines, April 6.
- Public Health Issues in Disasters Seminar, Department of International Relations, Johns Hopkins University, April 12.
- Workshop on Preparing for Hazardous Material Transportation Incident Responses, Washington, D.C., May 10.

- The 29th International Congress of the International Institute of Sociology, Rome, Italy, June 16.
- The National Medical Response to a Catastrophic Disaster Conference, Denver, Colorado, June 28.
- Workshop on the UN International Decade for Natural Disaster Reduction: Policy Issues & Scientific Priorities, Trieste, Italy, July 4.
- Earthquake Injury Epidemiology for Mitigation and Response Workshop, Johns Hopkins University, July 10.
- Natural Hazards Research and Applications Annual Workshop Denver, Colorado, July 17.
- Theory and Research on Disasters Session. American Sociological Association Annual Meeting, San Francisco, California, August 13.
- International Conference on Emergency Health Care Development. Washington, D.C., August 17.
- International Committee on Major Hazards Meeting. World Association of the Major Metropolises, Paris, France, September 8.
- Reconstruction After Urban Earthquake Conference. National Center for Earthquake Engineering Research, SUNY at Buffalo, September 14.
- Symposium '89. Canadian Emergency Preparedness College, Arnprior, Canada, September 26.
- Institute of Sociology, Soviet Academy of Sciences, Moscow, USSR, October 12.
- Second Annual Emergency Preparedness Conference, Vancouver, Canada, October 24.
- Medical Planning and Care in Radiation Accidents Course. REACTS, Oak Ridge, Tennessee, October 25.
- University Lecture, Shippenburg University, October 26.
- The Second International Conference on Industrial and Organizational Crisis Management. New York University, New York, November 4.
- Workshop on Safety Control and Risk Management. Karlstad, Sweden, November 6.

4. Field Studies

The total number of different field studies undertaken by the Center reached 518 with the following undertaken in 1989.

- Lifeline planning, Portland, Oregon.
- Lifeline planning, Buffalo, New York.
- Lifeline planning, Seattle, Washington.
- Lifeline planning, Richmond, Virginia.
- Floods, Hamden, Connecticut.
- Plane Crash, Sioux City, Iowa.
- Hurricane Hugo, San Juan, Puerto Rico.
- Hurricane Hugo, Charleston, South Carolina.
- Hurricane Hugo, Charlotte, North Carolina.
- Earthquake, San Francisco, California.

Earthquake, San Cruz, California.
Tornado, Huntington, Alabama.
Explosion, Pasadena, Texas.
Tornado, Chester County, Pennsylvania

5. Visitors

Among visitors to the Center were staff members from:

- Institute for Systems Studies, Moscow, USSR.
- Department of Technology & Society, SUNY, Stony Brook.
- Emergency Communications Research Unit, Carleton University, Canada.
- Institute of Geography, Pantheon University, Sorbonne, Paris, France.
- Walter Reed Army Institute of Research, Washington, D.C.
- The Geological Survey, US Department of the Interior.
- Department of Politics, Victoria University of Wellington, New Zealand.
- Department of Sociology, Texas A & M University.
- Mass Emergencies Program, ISIG, Italy.
- Department of Oceanography, Millersville University.
- Department of Geography and Planning, University of New England, Armidale, Australia.
- Maravan Corporation, Venezuela.
- Department of Social Psychology, Toyo University, Tokyo, Japan.
- School of Hygiene and Public Health, John Hopkins University.
- Department of Psychology, Tokyo Woman's Christian University, Tokyo, Japan.
- External Affairs Department, Dupont Corporation.
- Australian Counter Disaster College, Mt. Macedon, Australia.
- Council, City of San Luis Obispo, California.
- Department of Sociology, College of William and Mary.
- Graduate Program in Communications, McGill University, Montreal, Canada.
- Department of Sociology, Rutgers University.
- Disaster Planning Firm, Columbus, Ohio.
- Private Consultant, Washington, D.C.

6. DRC Resource Collection

The Center obtained about 1,500 new publications during the year. This figure does not include continuing periodicals (which number about 175) announcements, photographs, radio/video tapes, and newspaper runs. A total of about 1,100 of the items were processed, making a total of around 25,000 in the Resource Collection and maintaining its status as the largest single collection anywhere in the world on the human and social aspects of disasters. The computerization of the cards of holdings now covers about 50% of the collection.

As part of its resource collection operation, DRC added new items to its publication list making 366 currently available for the public (some out-of-date items were withdrawn from circulation). While many items are distributed for free, sales at nominal costs of DRC publications increased over last year. Multiple copies of DRC publications were purchased for classroom use by several universities. In addition, a large number of items from the list were purchased by organizations ranging from international relief agencies and multinational private corporations to local emergency management personnel and private citizens.

Agreements to exchange DRC publications for their relevant organizational publications were made or reconfirmed with: the Natural Hazards and Application Center, University of Colorado, and the Hazard Reduction and Community Reconstruction Center at Texas A & M University, within this country and outside the country with the: Flood Hazard Research Center, Middlesex Polytechnic (Great Britain); Center for Research on the Epidemiology of Disasters, Louvain University (Belgium); Asian Disaster Preparedness Center (Thailand); Australian Counter Measures College; Mass Emergencies library of ISIG (Italy); Disaster Management Center (Indonesia); Emergency Communications Research Unit (Canada); Joint Research Center (India); Disaster Research Group (Sweden); Working Laboratory on Crisis Management (Soviet Union); Institute of Sociology (China); Disaster Management Studies Centre (Australia).

DRC used the BITNET computer system to set up a network and links among social and behavioral science disaster researchers, as well as to provide information about activities in the area. Because of limitations of resources, the operation of this service in late 1989 was turned over to the Natural Hazards Application and Information Center at the University of Colorado.

7. Other Service Activities

DRC directors are serving on the editorial boards of the following disaster relevant publications: Industrial Crisis Quarterly; Journal of Hazardous Materials; Hazard Monthly; Disaster Management; Journal of Traumatic Stress; International Journal of Mass Emergencies and Disasters; and the Psychosocial Stress Book series.

DRC directors were members of the following disaster related committees or groups: International Sociological Association Research Committee on Disasters (Dynes, President); Board of Advisors of the Center for Psychological Response in Disaster Emergencies at the New York Medical College; U.S. Geological Survey Working Group on Earthquake Injuries; Panel on Lifelines, National Institute of Building Science; New Castle County Delaware Hazardous Advisory Group; Advisory Committee on Disaster Research Planning of NCEER; University of Georgia Center for

Socio-Political Ecology and review panels of the National Science Foundation in Geography, in Sociology, in Earthquake Engineering, and in the Decision Risk and Management programs.

Quarantelli was appointed as a member of the Panel on the Evaluation of the United States-People's Republic of China Earthquake Engineering Program of the National Research Council, and also to the National Academy of Sciences US Committee on the UN Decade for Natural Disaster Reduction.

DRC directors also reviewed disaster related manuscripts for Journal of Traumatic Stress; Journal of Management Studies (Great Britain); American Sociological Review; Journal of Hazardous Materials; Social Problems; International Journal of Mass Emergencies and Disasters; Disaster Management (Great Britain); Disasters (Great Britain); Journal of Nervous and Mental Disease.

8. International Activities (not reported elsewhere)

(a) Dynes spent part of his sabbatical from November 1988-April 1989 at the Asian Disaster Preparedness Center in Bangkok, Thailand. He helped organized and coordinated the seminar noted below.

(b) The Center in cooperation with the Asian Disaster Preparedness Center held a seminar on Research in Socio-Economic Aspects of Disaster in the Asian-Pacific Region in Bangkok, Thailand, March 22-24. Participants were from India, Vietnam, Sri Lanka, Nepal, Bangladesh, Thailand, Philippines, Australia, Canada, Indonesia, Malaysia, Singapore, and the United States.

(c) Carlo Pelanda, the head of the Mass Emergencies program at ISIG in Italy visited the Center to discuss further implementing the exchange and other agreements reached between DRC and his group in 1986. The visit of an Italian researcher to DRC and a possible joint project in the mass media area was discussed.

(d) Prof. H. Hirose of Japan, the country's leading social science disaster researcher visited the Center to suggest the resumption of closer ties with researchers in his country. Agreement was reached about a possible visit of Quarantelli in 1990 to Japan; later agreement was also reached in a visit by Prof. Mikami that the results of earlier collaborative work by Japanese-American researchers on the mass media in disasters be jointly published.

(e) Quarantelli visited the Soviet Union and discussed with the leading social science disaster researchers in that country ways of developing professional links and collaborative research between them and DRC. A tentative agreement was informally reached to try and develop an institutional link in 1990 between the Center and the first

(f) As a result of earlier contacts, a joint research project with Chinese disaster researchers was formally instituted (see under grants) and a Chinese student joined the DRC staff. However, the actual implementation of the study and other aspects of the agreement, including staff exchange visits, have had to be suspended for the time being given current United States-Chinese governmental relations.

9. The Future of DRC

Prof. Kathleen Tierney became the Center's Research Director in July 1989 (and Prof. Joanne Nigg will become its Director in January 1990) taking the places of Prof. Dynes and Quarantelli who have become Research Professors.

The move of the Center to new quarters originally scheduled for the early summer of 1989 has been postponed to early 1990.