ANNUAL REPORT

1986

DISASTER RESEARCH CENTER

UNIVERSITY OF DELAWARE

The Disaster Research Center (DRC) resumed full operations in 1986.

1. Grants and Contracts:

DRC had three grants and a contract during the year.

National Science Foundation grants--

- Mass media systems and community hazards and disasters. \$174,570. 9/1/85-2/29/88.
- 2. The organizational and public response to the September 19, 1985 Mexico earthquake. \$104,063. 6/1/86-11/30/87.
- 3. Joint Italy-United States seminar on social preparation, response, and recovery from major community disasters. \$13,057. Summer-Fall 1986.

Federal Emergency Management Agency contract-

 Disaster analysis Phase I & II. \$200,644. 9/30/85-9/30/87. (Renewable for three more years at approximately \$100,000 a year, subject to availability of funding.)

2. Publications

DRC personnel produced 21 publications during the year.

Chapters in Books

"Social Problems of Adjustment and Relocation: Some Questions and Comments," E. L. Quarantelli, <u>Proceedings of the International Conference on Disaster Mitigation Program Implementation.</u> Ocho Rios, <u>Jamaica, November 12-16, 1984.</u> (Alexandria, Virginia: Center for International Development Planning and Building, Virginia Polytechnic Institute and State University, 1986): 84-90.

"Role Simplification in Disaster," Russell R. Dynes and E. L. Quarantelli, Role Stressors and Support for Emergency Workers. (Washington, D.C.: U.S. Government Printing Office, 1986): 23-37.

"The Need for Planning, Training, and Policy on Emergency Preparedness," E. L. Quarantelli, Symposium 1985 Training and Education for Emergency Preparedness in Canada Today & Tomorrow, ed.

DRC LIBRARY
University of Delaware

by M. E. Logan (Ottawa, Canada: Emergency Planning Canada, 1986): 80-86.

Articles in Journals

"Research Findings on Community and Organizational Preparations for and Responses to Acute Chemical Emergencies," E. L. Quarantelli and Jane Gray, <u>Public Management</u> 68 (1986): 11-13.

"Summary Address at Seminar on the Social, Cultural, and Economic Impact of Disaster Emergency Aid in Developing Countries," E. L. Quarantelli, <u>ADDRO Newsletter</u> 4 (1986: 35-40.

"Le jour ou le desastre frappera vous serez admirable," E. L. Quarantelli, Le Temps Strategique 19 (1986/1987): 75-80 (in French).

Miscellaneous Reports

The Disaster Research Center: Its History and Activities, E. L. Quarantelli, Russell R. Dynes, and Dennis E. Wenger, 1986.

Mass Media & Disaster: Annotated Bibliography, B. Friedman, D. Lockwood, L. Snowden, D. Zeidler, 1986.

Preliminary Papers (intended for later fall publications)

"The Concept of Role in Disaster Research," Russell R. Dynes, 1986.

"Problems in Disaster Preparedness and Response: A Commentary for a Conference in a Developing Country," E. L. Quarantelli, 1986.

"Research Findings on Organizational Behavior in Disasters and Their Applicability in Developing Countries," E. L. Quarantelli, 1986.

"Disasters and Destitution: A Perspective on Entitlement and Relief," Sameer Vyas. 1986.

"Role Conflict and Role Abandonment in Disasters: A Need for Empirical Reorientation," Barbara Friedman, 1986.

"Future Directions in Disaster Research," Russell R. Dynes, 1986.

"Disaster Studies: An Historical Analysis of the Influences of Basic Sociology and Applied Use on the Research Done in the Last 35 Years," E. L. Quarantelli, 1986.

"The Role of Archives for Comparative Studies of Social Structure and Disaster," Dennis E. Wenger, 1986.

"Disaster Crisis Management," E. L. Quarantelli, 1986.

"Planning and Management for the Prevention and Mitigation of Watural Disasters, Especially in a Metropolitan Context: Initial Questions and Issues Which Need to be Addressed," E. L. Quarantelli, 1986.

"Sociopsychological Aspects of Evacuating or Sheltering Health Care Facilities in the Event of a Nuclear Power Plant Accident," E. L. Quarantelli, 1986.

Final Project Report

Disaster Analysis, Dennis Wenger, E. L. Quarantelli and Russell Dynes, 1986.

Miscellaneous Report

"Report on United States-Italy Joint Seminar on Social Preparation, Response, and Recovery from Major Community Disasters," E. L. Quarantelli, 1986.

3. Presentations and Participations

DRC personnel made presentations at the following 25 meetings:

World Congress of Sociology, New Delhi, India Dow Chemical Company Global Safety Directors meeting, Columbia Lakes, Texas Hazards Research and Applications Workshop, University of Colorado Asian Disaster Preparedness Center, Bangkok, Thailand National Conference of the American Society for Public Administration, Anaheim, California Australian Counter Disaster College, Mt. Macedon, Australia American Sociological Association Annual Meeting, New York City Delaware State Fire School, Dover, Delaware International Seminar on Regional Development Planning for Disaster Prevention, Nagoya, Japan Kiwanis, Wilmington, Delaware Center for Resources & Environmental Studies, Australian National University, Canberra, Australia Natural Disaster Organization, Canberra, Australia Delhi Chapter of Mahavir International, New Delhi, India International Conference on Industrial Crisis Management, New York City Universidad Iberoamericana, Mexico City, Mexico Partners of the America Disaster Management Seminar, Washington, D.C. Workshop on Urban Planning and Disaster Mitigation, Tokyo, Japan Eastern Sociological Society Annual Meeting, New York City Envirotech 86, Bombay, India Symposium on Social Structure and Disaster, College of William and Mary Center for Disaster Studies, James Cook University, Townsville, Australia NAM Chemical Safety and Loss Prevention Subcommittee Meeting,

Region III National Coordinating Council on Emergency Management, Wilmington, Delaware Overseas Disaster Response Organization, Sydney, Australia

Parent's Day, University of Delaware

Washington, D.C.

In addition, DRC personnel participated in the following meetings:

Database Network Elements and Computer-Based Training Applications, Washington, D.C.

Second International Assembly on Emergency Medical Services,
Baltimore, Maryland
US-Mexico Workshop on the 1985 Earthquake, Mexico City, Mexico
Federal Emergency Management Agency, Washington, D.C.
Joint Assistance Center meeting, New Delhi, India
Radiological Accidents—Perspective & Emergency Planning, Bethesda,
Maryland
Meeting of the International Research Committee on Disasters, New York City
National Emergency Training Center, Emmitsburg, Maryland
Seminar, La Trobe University, Bundoora, Australia

Also, DRC directors were members of the following committees:

National Science Foundation Panel on Proposal Review
New Castle County Hazardous Advisory Board
National Academy of Science Panel on Seismic Safety
Panel on Human Factors Research Needs in Nuclear Regulatory Research

4. Field Trips

The total number of different field studies undertaken by the Center reached 488. During the year, the following 14 incidents were studied (some involved recurrent visits to the area):

Flood, Santa Rosa, California
Tornadoes, Covington, Kentucky
Tornado, Sweetwater, Texas
Floods, northern Pittsburgh, Pennsylvania
Hurricane Bonnie, Houston area, Texas
Train Derailment and Phosphorus Spill, Dayton area, Ohio
Hurricane Charlie, Atlantic City, New Jersey
Chemical Plant Explosion, Newark area, Delaware (training trip)
Plane Crash, Cerritos, California
Anniversary Followup of Mexico City Earthquake, Mexico
Chemical Spill, King of Prussia, Pennsylvania
Gasoline Leak, Claymont, Delaware
Train Derailment and Chemical Spill, Port Deposit, Maryland
Hotel Fire, San Juan, Puerto Rico

5. Visitors

In connection with the Italy-United States Seminar held at DRC in October 1986, there were Italian disaster researchers from:

University of Rome
Universita Cattolica del Sacro Cuore, Milan
University of Udine
University of Pavia
Franco Angeli
Institute of International Sociology

and American disaster researchers from:

University of California, Los Angeles University of Massachusetts University of Colorado
College of William and Mary
Arizona State University
St. John's University
University of Southern California
New Mexico University
The World Bank, Washington, D.C.
University of Denver
University of Georgia

Third country observer from the People's Republic of China.

At other times there were additional visitors:

Foreign

University of Tokyo, Japan
Oxford Polytechnic, Great Britain
University of Oslo, Norway
Emergency Measures Organization, New Brunswick, Canada
Office of Civil Protection, Mexico
University of Haifa, Israel
Nagoya University, Japan
District Council of Stirling, Great Britain
Toyo University, Japan
Facultad Latinoamericana de Ciencias Sociales, Mexico

Domestic

Radiation Management Corporation, Philadelphia, Pennsylvania Eastern Region National Weather Service Chemical Manufacturer's Association John Hopkins University (Dept. Emergency Medicine) IBM Safety Office University of Pennsylvania (Dept. of Planning) National Science Foundation Delaware Psychiatric Emergency Services Region III Federal Emergency Management Agency Hazards Assessment Laboratory, Colorado State University State Fire School, Dover, Delaware George Washington University Boston Globe DuPont, Inc. Virginia Polytechnic & State University (College of Urban Studies) Oak Ridge National Laboratory University of Illinois (Dept. of Health) Harrison County, Mississippi Civil Defence University of Maryland Battelle Human Affairs Research Center Rohm & Haas Ins. University of North Carolina at Charlotte USGS/USAID Office Ohio State University (Dept. of History) Federal Emergency Management Agency College of William & Mary

Other

A faculty member from Stetson University spent six weeks as a Visiting Research Associate at DRC.

7. DRC Resource Collection

The Center received approximately 1,000 new publications during the year. This figure does not include continuing periodicals (which number over 100), announcements and photographs, and newspaper clippings and radio/video tapes. A total of 662 were fully processed, making the grand total about 19,000 items in the Resource Collection and maintaining its status as the largest collection of publications in the world on the human and social aspects of disasters.

New agreements to exchange DRC publications for their relevant organizational publications, to be put into the DRC Resource Collection, were made with:

The Asian Disaster Preparedness Center library in Bangkok, Thailand The Australian Counter Measures College library in Mt. Macedon, Australia

The Munich Reinsurance Company in West Germany

The Indonesian Disaster Management Library in Jakarta, Indonesia

The Mass Emergencies Library of ISIG in Gorizia, Italy

The Center for Disaster Studies library at James Cook University in Queensland, Australia

Old exchange agreements were reconfirmed with disaster research organizations and key researchers in Canada, Sweden, Japan, Belgium, Great Britain, and India, as well as in the United States.

Tha archives of the American Sociological Section on Collective Behavior and Social Movements were housed at DRC in 1986.

About 15 percent of the card catalog information has now been computerized. Work also continued on the inventory of the holdings, updating the subject index and processing the backlog of items which had accumulated because of their lesser priority for research purposes. A few gaps in rarer and older works were filled. A small videocassette collection has been started.

As oral history project on the pioneering disaster researchers was initiated. The tapes of this work will be deposited in the Center's Resource Collection.

As part of its resource collection operations, DRC added 20 new items to its publication list bringing to more than 250 the number currently available to the public. While many items are distributed for free, sale of DRC publications, at nominal costs, amounted to around \$5,000. Multiple copies of DRC publications were purchased for use in classes at the northwest Campus of Indiana University and at Hilo College in Hawaii. There were purchases of a large number of items on the DRC Publication List by the University of Missouri Medical College Library in Kansas City; The

Esso Chemical Information Center in Canada; The Loss Prevention Center Association of India; The NETC Learning Resource Center in Maryland; Hazards Assessment Laboratory at Colorado State University; The Getty Conservation Institute in West Germany; the Union Carbide Corporation; Centro Regional de Investigacions in Argentina; and the Civil Protection Agency in Mexico.

DRC directors are serving on the following editorial boards of disaster relevant publications: International Journal of Mass Emergencies and Disasters; Journal of Hazardous Materials; Hazard Monthly; Disasters: The International Journal of Disaster Studies and Practice; and the Psychosocial Stress Book series.

9. Other International Activities

The Center has developed close ties and informal agreements with the Mass Emergency Program of the Institute of International Sociology (ISIG) in Italy. The first step was the Italy-United States Seminar held in October. Out of this has developed an agreement to exchange personnel in 1987 and to initiate some collaborative cross societal studies. DRC will continue to act as the distributor of ISIG's disaster publications in the English speaking world, and ISIG will distribute the DRC publications in Italy.

Visits of Japanese disaster researchers to DRC, and a DRC director's visit to Japan, reinforced existing ties. One outcome will be a publication by the University of Tokyo Press in 1987 of the results of a joint DRC-Japanese cross societal study. Future joint work was explored and there was a tentative agreement on an extended visit of a Japanese researcher to DRC.

Separate visits by two DRC directors to the Asian Disaster Preparedness Center led to an agreement not only of exchange of publications, but also to future DRC involvement in some of the Preparedness Center's research, as well as exploration of the possibility of an extended visit by DRC personnel to the Asian organization.

10. <u>DRC Personnel</u>

Faculty

- 1. Russell R. Dynes, Co-Director
- 2. Allan McCutcheon, Research & Computer Specialist
- 3. E. L. Quarantelli, Director
- 4. Dennis Wenger, Co-Director

Graduate Students

- 1. Michele Di Palo
- 2. Henry Fischer, III
- 3. Barbara Friedman
- 4. Laura Ketter
- 5. John Linn
- 6. Dorothy Lockwood
- 7. Sarah Montgomery

- 8. Lynn Snowden
- 9. James Wright
- 10. Dana Zeidler

Staff

- 1. Florence Barron, Librarian
- 2. Mary Ann Hughes, Librarian
- 3. Debbie Moral, Librarian
- 4. Marjorie Simmons, Office Coordinator

Other

1. Michelle Klein, Publication Clerk

Student Workers

- 1. Wendy Hallock
- 2. Julia Hughes
- 3. Jennifer Picker

Volunteer Personnel

- 1. Pam Huxtable
- 2. Sean Moran
- 3. Craig Rogge
- 4. Michelle Sharp
- 5. Martin Smith
- 6. Dan Tompkins