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ICDRM

The George Washington University Institute for Crisis, Disaster, and Risk Management

Educating the Emergency Manager of the Future: The GW Experience

John R. Harrald, Ph.D.

Director, Institute for Crisis, Disaster, and Risk Management

The Emergency Manager of the Future
Disasters Roundtable Workshop
Sponsored by the National Academies
June 13, 2003



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The GW Institute for Crisis, Disaster, And Risk Management

- **Chartered in 1994. Institute objective is to “improve the disaster, emergency, and crisis management plans, actions, and decisions of government, private, and not for profit organizations.”**
- **Research in emergency management, risk management, crisis management**
- **Graduate education (M.S., D.Sc., graduate certificate) in Crisis, Emergency, and Risk Management with Department of Engineering Management and Systems Engineering**
- **Professional activities—conferences, Forum, partnerships**



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Three Observations

- **Sept 11 significantly increased the demand for, and focus of, GW graduate program**
- **Emergency managers now must operate within a Homeland Security context that expands domain of required expertise, personal and organizational relationships**
- **Graduate education will increasingly be a critical factor in increasing professionalism of emergency management**



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GW Faculty and Students Responded at Pentagon and WTC





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Research Based:Recent ICDRM Projects

- Development of a Medical and Health Incident Management System for Mass Casualty Events (Sloan Foundation funded)
- Evaluation of the Response to the Attack on the Pentagon (National Science Foundation funded)
- Evaluation of the US Army Corps of Engineers response to the 9-11 Attacks (USACE funded)
- The Strategic Impact of the 9-11 attacks on Corporate Crisis Management (NSF funded)
- Response to Human Needs following the 1999 Turkey earthquakes (NSF funded)
- Evaluation of Risk Exposure for San Francisco Bay Ferry System (Water Transit Authority Funded)
- Risk Assessment of the Washington State Ferries (WSF Funded)



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Partnerships

U.S. Academic: Virginia Tech World Center for Disaster and Risk Management
Joint Center for Disaster and Risk Management

International: Bogazici University, Turkey
*Disaster Management Partnership
Joint Research*

DongGuk University, Korea
Joint Research—Visiting Faculty

Karlsruhe University, Germany

Delft University, Netherlands

University of Maribor, Slovenia



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Government:

U.S. Army Corps of Engineers

Disaster Management Training and Education

Strategic Planning

District of Columbia Emergency Mgt.

Support of DC EMA

Corporate:

Corporate Response Group now Marsh

Crisis Management Roundtable

Corporate Crisis Management Survey

SAIC

Conference, Forum sponsorship

Partnerships



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The George Washington University Institute for Crisis, Disaster, and Risk Management

The George Washington University Crisis, Emergency and Risk Management Curriculum

Home Department

**Department of Engineering Management and Systems
Engineering, School of Engineering and Applied
Science.**

Focus

Provide an interdisciplinary graduate level education for persons engaged in or seeking professional careers in crisis and emergency management in the in the public, private and not-for-profit sectors. Program has management focus & strong technological foundation.



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Emergency Management

The management of risk so that societies can live with environmental and technical hazards and deal with the disasters that they cause.

William Waugh: Living with Hazards, Dealing with Disasters: an Introduction to Emergency Management



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The George Washington University Institute for Crisis, Disaster, and Risk Management

The Crisis, Emergency and Risk Management Program



Credentials Offered

M.S., D.Sc in Engineering Management with CERM concentration
Graduate Certificate in Crisis and Emergency Management
Graduate Certificate Emergency Management and Public Health

Content

Ten graduate level CERM courses taught by expert interdisciplinary faculty.

Four core courses in management and systems required for masters degree.

Electives in Schools of International Affairs, Public Administration and Public Policy, Media and Public Affairs



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Student Population



- 20 Doctoral Students, 80 Master and Certificate Students
- Combination of part time/full time students
- Part time students typically work in Washington emergency management/homeland security agencies and ngos, area consulting companies.
- Full time students are mix of younger U.S. citizens seeking career change and international students



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Where are they now: First (2001) Graduates

- Senior Consultant with Booz Allen Hamilton, working on critical infrastructure protection, continuity of operations, domestic preparedness
- Emergency Management and Homeland Security Coordinator for the Corporation for National and Community Service (CNCS)
- Acting Director, Civil Emergency Management Brand of the U.S. Army Corps of Engineers
- Program Specialist, EP&R Directorate (FEMA), Department of Homeland Security
- Associate, Community Research Associates, designing table top and command post exercises



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Re-directing the U.S. Response System (Homeland Security Presidential Decision Directive-5)—Fundamental Change in Federal, State, Local conduct of EM

- **Creation of National Incident Management System (NIMS)**
- **Creation of National Response Plan (NRP)
(integration of Federal Response Plan,
National Contingency Plan, Federal
Radiological Response Plan, Continuity of
Operations Plan)**
- **Creation of Emergency Preparedness and
Response Directorate in DHS**



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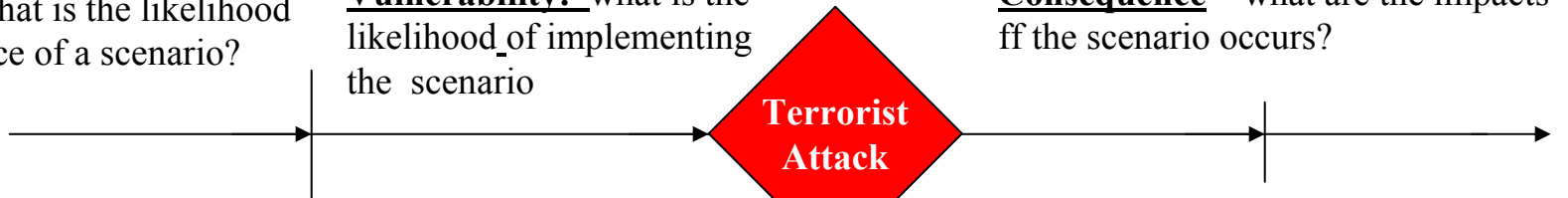
The Challenge Ahead: Integrating Homeland Security and Emergency Management

$$\text{Risk} = \text{Probability} \times \text{Consequence}$$

Threat: What is the likelihood of occurrence of a scenario?

Vulnerability: what is the likelihood of implementing the scenario

Consequence—what are the impacts if the scenario occurs?



Domain Awareness

*Prevention/
Mitigation*

*Preparation/
Planning*

Response

Restoration

Recovery

Conceptual Link is Risk Management



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Facilitation of Professional Integration/Expansion

- Journal of Homeland Security and Emergency Management (JHSEM) to be published by Berkeley Electronic Press
www.bepress.com/jhsem
- The Society of Homeland Security and Emergency Management (SHSEM) to be established July—August 2003



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