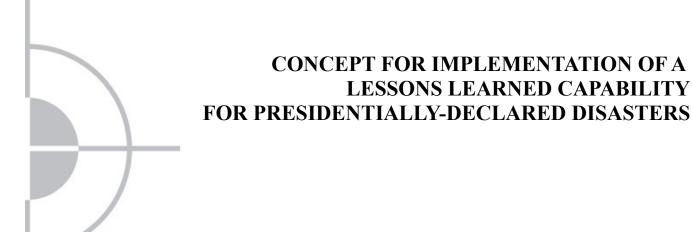
# **WORKING PAPER 09-01**



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## **About Christian Regenhard**

Christian Michael Otto Regenhard was born on August 25, 1973. He was raised in Co-op City, Bronx, New York. After graduating from the Bronx High School of Science, he served five years in the United States Marine Corps, leaving as a decorated Recon Sergeant. He traveled extensively, often to remote areas of Central and South America, to pursue his love of rock climbing and diverse cultures. After studying language, art and writing at San Francisco State University, he was hired by the Fire Department of New York (FDNY), graduating from probationary school in July 2001. He was assigned to Ladder 131 when he was killed in the collapse of the World Trade Center on September 11, 2001 at age 28.

#### **About the Center**

The Christian Regenhard Center for Emergency Response Studies (RaCERS) is an applied research center focused on development of a mix of grounded theory and traditional empirical analysis in the areas of emergency response, coordination of first responders, and dynamics of large-scale incident management and response. The Center is unique in its devotion to first responder-defined and actionable research on policy aspects of emergency response and homeland security from a perspective inclusive of police, fire, and emergency medical services.

#### About the College

Since its founding in 1964, John Jay College of Criminal Justice has been a leader in the field of public safety, with a diverse variety of academic programs and research capabilities devoted to the study of emergencies and law enforcement organizations such as the fire service, police departments, emergency management offices, and security concerns unequaled by any other academic institution in the United States.

One of the unique aspects of John Jay is its student body. Our students represent a diverse mix reflecting New York, but also the nation and world. Our in-service students include many mid-career emergency responders from virtually every local, state, and federal law enforcement, security, and emergency response organization. As such, we have a unique and long-standing commitment to educating current and future leaders in the emergency response field. John Jay lost over 60 of its alumni, faculty, and students on 9/11. As such, we are uniquely dedicated to enhanced responder safety and effectiveness.

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# A CONCEPT FOR IMPLEMENTATION OF A LESSONS LEARNED FUNCTION FOR PRESIDENTIALLY-DECLARED DISASTERS

#### BACKGROUND

A recurring theme of organized response to natural and man-made disasters is the need for a) improved performance and b) better understanding of the dynamics of these complex events. At the federal level, the Federal Emergency Management Agency (FEMA), a part of the Department of Homeland Security (DHS) since 2003, is no exception.<sup>1</sup>

Even with the significant attention devoted to performance of federal agencies following disaster, much of this attention is devoted to high-level, institutional response. Interactions of government entities and headquarters or high-ranking officials with each other, and often elected officials. While these afteraction investigations and critiques are legitimate and appropriate, there is little attention devoted to the performance of personnel "on-the-ground" directly engaged in search, rescue, or other disaster relief activities.<sup>2</sup>

As a consequence of this focus on high-level analysis, much of the resulting findings may not have direct applicability to first responders, who form the basis of the emergency relief assets deployed to disasters. Because of resource and institutional limitations within the highly decentralized communities of police officers, firefighters, and emergency medical workers, their constituent organizations do not have a strong history or capacity for developing and sharing lessons learned information. Further, disasters, by their very nature, bring together personnel from multiple agencies operating under *ad hoc* or temporary command structures and dealing with circumstances beyond day-to-day experience.

As such, disaster scenes are a unique and critical opportunity for generation of lessons learned that will inform both a) agency-level leaders at the federal and state government and b) local first-responders who were deployed to assist in these events. Indeed, these high consequence events are the very types of incidents that policymakers and elected officials focus on in assessing the performance of response agencies at all levels of government. As was shown so amply on 9/11/01, these events can also pose a great risk not only to the public, but to first responders.

## CENTER FOR ARMY LESSONS LEARNED (CALL): A PRECEDENT AND MODEL

The Center for Army Lessons Learned (CALL), located at Fort Leavenworth, Kansas, and with employees posted around the world at major Army commands, is an exemplary precedent of an organizational learning process in action. In brief, CALL fulfills a valuable function by providing a collection of actionable data gathered from the field based on direct observation and extensive end-user interviews and input. CALL then provides rapid analysis of this data and 1) provides "vetted" and

- 1 See for example, Franklin, Daniel. "The FEMA Phoenix" *Washington Monthly*. July/August 1995; Daniels, Ronald et al. *On Risk and Disaster: Lessons from Hurricane Katrina*. Philadelphia: Univ. of Penn. Press, 2006; U.S. Congress. House Science Committee. "107<sup>th</sup> Congress, "The Investigation of the World Trade Center Collapse: Findings, Recommendations, and Next Steps: Testimony of Glenn P. Corbett, John Jay College. 109<sup>th</sup> Congress, First Session. 26 October 2005."
- 2 Jennings, Charles R. "Toward a Program of First Responder-based Disaster Research" presented October 2008 at Symposium on Critical Incident Analysis sponsored by Academy for Critical Incident Analysis at John Jay College.



"field-ready" information on request to personnel within the military, 2) develops authoritative guidance in the form of publications available to personnel before and during deployment; 3) provides documented information to those elements of the Army tasked with developing doctrine (the civil equivalent might be standard operating procedures or policies). These CALL products then find their way into revisions of Army doctrine, which is then translated into training materials incorporated into regular training cycles for new or refresher training.

CALL operates on a cycle more rapid than the development of new policies or training courses, resulting in a significant "compression" of the time between real-world experience of personnel delivering the service and those writing the training and policies. As such, CALL saves lives and enhances the Army's ability to learn from its experience by rapidly transmitting actionable information to personnel going into the field.

An important point to note is that CALL does not fulfill an investigative or disciplinary role. Its activities are directed at identification and disclosure of experiences of personnel operating "on the ground." It does not report on instances where there are not emergent issues – that is, failures to follow known procedure and accepted practices are not the subject of CALL publications.

With over 200 staff, CALL is a significant investment on the part of the Army to support some 500,000-600,000 troops in uniform around the world. When these resource levels are translated to the civilian first responder community, we would find a comparable effort directed at the civil first responder community would conservatively require some 700 personnel based on a rough extrapolation of the numbers of law enforcement and fire service personnel in the United States.<sup>3</sup> Of course, this analysis is illustrative, and does not account for the complexity of dealing with the tens of thousands of state and local police and fire agencies across the United States.

At present there is no comparable function ongoing across organizations, especially from a multidisciplinary perspective. There are safety-related data collection and analysis schemes in operation, but they are generally narrowly focused, and do not have a wide influence. Numerous efforts are ongoing at the local level or among sub-communities such as hazardous materials specialists or tactical officers. These efforts suffer from being under-resourced, focused on a single agency, and lacking in a methodological consistency and rigor, particularly in the area of analysis. As a consequence, there is no formal mechanism for the nation's first responders to "learn" from experience, and the adoption of new policies and practices lags as similar experiences occur repeatedly, resulting in a toll of reduced efficiency, excess loss, and reduced effectiveness.

## PRESIDENTIALLY DECLARED DISASTERS: A TESTBED FOR LESSONS LEARNED

One of the primary challenges in conceptualizing development of a more robust "lessons learned" function for civil first responders is the fragmentation and diversity of first-responder organizations across the United States. Organizing a national system would require significant administrative challenges While elements of DHS<sup>4</sup> have discussed some elements of a lessons learned model, none

<sup>4</sup> For example, the United States Fire Administration published TR-159, *Special Report: The After-Action Critique: training Through Lessons Learned."* in April 2008.



<sup>3</sup> According to US Fire Administration, there are 323,000 full-time firefighters and 825,000 volunteers [http://www.usfa.dhs.gov/statistics/firefighters/index.shtm] while there are 731,000 State and local law enforcement personnel [http://www.ojp.usdoj.gov/bjs/lawenf.htm] according to the US Department of Justice.

have embraced a truly comprehensive and authoritative approach that could yield benefits in a sustained fashion across organizations and over a longer period of time by recording results in the public domain. The Lessons Learned Information Sharing (LLIS) program is the closest approximation within the Department of Homeland Security. These proposed efforts would be integrated with and disseminated through LLIS, in addition to directly through the RaCERS web site.

Presidentially-declared disasters offer an ideal environment for implementation of a lessons learned program. Disasters offer the potential for a true cross-discipline development of responder guidance, and documentation of conditions in the field which is information that is not formally captured, particularly for local responders who may be deployed under provisions of the Emergency Management Assistance Compact (EMAC).

The challenge of disasters also presents an opportunity, in that the time scale on disasters is such that a site team can be dispatched to make direct observations, and to collect data from responders before they are demobilized. The enables an unprecedented awareness of activities and capitalizes on and reinforces the structure of incident management and the National Response Framework. Funding to undertake data collection during disasters can come from existing funding stream, and can be incorporated into FEMA requirements for "overhead" associated with a disaster declaration. A lessons learned program is consistent with the provisions of the Stafford Act Sec. 201; Sec. 611 (e) (1) (detailed functions or administration)<sup>5</sup>.

#### ORGANIZATIONAL MODEL: RaCERS

The Christian Regenhard Center for Emergency Response Studies (RaCERS) located at John Jay College of Criminal Justice of the City University, a DHS Minority Serving Institution, would administer and manage this expanded lessons learned capability.

Staff to populate this capability would be drawn from a number of sources. The primary challenge is not to identify professionals with the skills, ability, and background to go into the field to collect data through interviews and direct observation, but in developing a training program on the "lessons learned" methodology to provide the required effectiveness and consistency. As with CALL, retired first responders of management ranks would constitute a fertile pool of analysts. In-service first responders from across the nation would be used as field data collectors. Special emphasis would be paid to personnel with specialized skills and experience such as incident management, urban search and rescue, hazardous materials, counter-terrorism, tactical operations, and emergency medical services, including Disaster Medical Assistance Team (DMAT). Other staff could come from, academics, emergency managers, DHS staff, and subject matter experts drawn from DHS Centers of Excellence and other institutions.

The field team would be constituted based on the type, size, and complexity of the disaster. This team would focus on first responder actions, and would interface with but not replicate work of existing groups such as critical infrastructure engineering specialists or psychologists. The field team would be paid on a per diem basis (consultants) or their costs would be reimbursed to their organizations.

<sup>5 &</sup>quot;research and studies as to the best methods of treating the effects of hazards" 42 USC 5196.



The organizations and a representative arrangement of partners is shown in the figure in this report. Active coordination and collaboration would take place among supporting organizations and RaCERS.

#### **BRIEF WORK PLAN**

To achieve this vision the following steps might be undertaken:

# Preparation Stage –

- 1. Visit and liaise with Collaborating Organizations
  - 1. LLIS
  - 2. US Army CALL
  - 3. Wildland Center for Lessons Learned
  - 4. University of Colorado Natural Hazards Center
  - 5. Memorial Institute for the Prevention of Terrorism
- 2. Undergo Lessons Learned Training at CALL
- 3. Adapt CALL training to a civil responder lessons learned training curriculum at two levels one for prospective site team personnel, another for "reporters" to use After Action Reports to be submitted to analysts.
- 4. Identify and train personnel for field deployment
- 5. Design protocol for activation and dispatch of team
- 6. Identify and train Field Data Collectors and Site Response Personnel.

# Action Stage -

- 7. Deploy staff to Disasters
- 8. Subject Data to Analysis
- 9. Develop Lessons Learned Documents/Reports
- 10. Disseminate Reports through trade publications, conferences, and first responder organizations

Typical Site Team Composition – DHS staff, Subject Matter Experts (as appropriate), Field Data Collectors and Analysts, Academics (drawn from DHS Centers of Excellence, academic researchers, and others pre-cleared).

Housing this initiative at RaCERS would provide a number of benefits.

- Provides "neutral" organization, promoting candor and emphasizing lessons learned approach
- Permits robust climate for confidentiality
- Direct access to academic experts and expertise to evaluate and discern lessons from data collected
- Infrastructure in place to apply findings to design of educational and training offering.

## **ACKNOWLEDGMENTS**

The Christian Regenhard Center for Emergency Response Studies (RaCERS) was conceived as a lessons learned organization working across traditional public safety disciplines. Inspired by the World Trade Center response, the coordination of police, fire, and EMS personnel at large scale events was envisioned as a primary research focus. The Center was formed in late Fall 2008 with initial funding from Senators Hillary Clinton, Charles Schumer, and Rep. Jerrold Nadler (D-NY).



The author wishes to thank the staff of the Center for Army Lessons Learned under the direction of Col. Robert W. Forrester, for their assistance; and Glenn P. Corbett, Chair of the Department of Protection Management at John Jay College of Criminal Justice (CUNY) for his recognition of the need for enhanced organizational learning in the first responder community. The Regenhard Center was conceived without knowledge of CALL. Our visit in June 2009 was extremely influential, and impressed us with the potential for a multi-discipline, public safety first-responder lessons learned capability. This capability is a significant enhancement of the basic lessons learned approach of the Regenhard Center.

**APPENDICES** 

Concept Organizational Diagram



# CONCEPT FOR IMPLEMENTATION OF LESSONS LEARNED CAPABILITY FOR PRESIDENTIALLY-DECLARED DISAS

