Quick Response Report #157

Terrorism in Shanksville: A Study in Preparedness and Response

Nancy K. Grant and David H. Hoover
Co-Principal Investigators

Annamarie Scarisbrick-Hauser and Stacy L. Muffet
Research Associates

The University of Akron
Akron, Ohio 44325-7904

e-mail: ngrant@uakron.edu
e-mail: dhoover@uakron.edu

2002
This material is based upon work supported by the National Science Foundation under Grant No. CMS-0080977. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation or the Natural Hazards Research and Applications Information Center.


INTRODUCTION

Immediately following the terrorist attacks of September 11, 2001, a team of researchers from The University of Akron was awarded funding from the Natural Hazards Center in Boulder, Colorado to participate in a Quick Response Grant. The initial research proposed emerged from similar case studies that had been performed on the Lonz Winery balcony collapse and the Medina Steam Engine explosion. Both of these incidents, like the response to the crash of United Flight 93 in Somerset County Pennsylvania, involved a multiple jurisdiction local response as well as intergovernmental response. Initial exploratory research from the first two case studies led to the development of the research questions to be examined in the response to the United 93 crash.

INITIAL RESEARCH QUESTIONS

The initial research questions were to what extent is the response to a disaster in a small town/rural area involving responders from multiple emergency response jurisdictional entities such as that of the downed United Flight 93 enhanced by: 1) serious exercising of existing emergency response plans and 2) personal knowledge of and trust in fellow emergency responders, especially those in charge. These were two items that had emerged from each of the previous case studies and the research team wanted to continue investigation to see if there is enough evidence for theory development. Given the fact that this was a terrorist incident while the others, also classified as technological disasters, were accidents, there is an added element to the Shanksville disaster site control. Since the cause was terrorism, the crash site was a crime scene and the final jurisdiction of the scene rests with the Federal Bureau of Investigation (FBI). Thus, this led to the corollary question designed to determine if the impact of the exercises and trust of fellow responders is mitigated by control of the site by external (i.e. federal/FBI) authorities.
A third component of the initial research was to examine the degree to which behavior conformed to the theory of convergence during a consensus crisis.

**RESEARCH PLAN AND TECHNIQUES**

This research project is a case study involving initial observation of the disaster site immediately following the incident in order to document activities and interactions among agencies followed by in-depth focused interviews of key local responders, including County Emergency Management Director, State EMA representative of the Western Pennsylvania Region, the County Coroner, the Salvation Army, the American Red Cross, the Pennsylvania State Police, and local emergency medical response personnel and local fire department responders. Additionally, local information pertaining to the response to the site and the community's reaction and activities following the incident were observed and documented.

**RESOURCES USED/DATA COLLECTION**

The initial research protocol called for focused interviews of emergency response personnel at the scene as soon as possible following the crash. Arriving on scene in the early morning hours of Friday September 14th, the investigators found that initially the site was too busy for responders to take time for formal interviews. Several agreed to talk briefly informally and to be available at a later time. The D-MORT team was arriving that day and there was a lot of focus on finalizing the morgue set up and securing and providing identification for those personnel. As a result, the researchers decided to rely primarily on observation and field notes for the first 24 hours, documenting interactions as well as conversations and activities. These field notes were written in more detail that evening and compared among the research team for enhanced validity and to build additional questions for the focused interviews that followed. The research team returned to the site after the recovery process was finished and interviewed several of the key responders to the scene. During both visits, local documents such as newspapers, flyers, and signs were collected and photographed as well. The research team also observed local memorial services and commemoration activities and recorded field notes which were later used in documenting findings and answering the research questions (As well as building more questions for future research).

**FINDINGS TO DATE**

The existence and exercise of local comprehensive response plans enhanced not only the initial response to Flight 93, but also the longer term recovery of the site. Additionally, the fact that many of the local responders as well as several state responders work together on emergencies on a regular basis enhanced the cooperative nature of the recovery interactions. Response experiences included multi-jurisdictional responses to major fires or motor vehicle accidents and the fact that the Pennsylvania State Police (PSP) are the primary law enforcement agency in the area and routinely respond to emergencies with local EMS and fire department personnel. Thus, there is familiarity with operations and an understanding of responsibilities, resources, and capabilities. Because the area is sparsely populated, the emergency response resources in terms
of personnel as well as equipment are limited. Therefore, whenever there is a large-scale emergency event, the various departments must work cooperatively in order to handle the situation effectively. Mutual aid is a way of life in Somerset County. Additionally, the Somerset County Emergency Management agency regularly schedules and conducts mass casualty exercises which involve all emergency responders in the county as well as PSP and state emergency management personnel. These exercises were generally designed to address mass casualty incidents on the Pennsylvania Turnpike and small commuter plane crashes. The fact that the Pennsylvania Turnpike traverses the county from east to west makes mass casualty a realistic possibility. The presence of small regional airports in the county as well as contiguous counties poses the risk of small private aircraft and commuter aircraft accidents. Over the years, several small aircraft accidents had occurred in the county, requiring the implementation of the plans.

However, a more significant event was the U.S. Air Flight 427 crash on September 8, 1994 just north of the Greater Pittsburgh International Airport. The Western Pennsylvania Emergency Management liaison had worked that scene and therefore brought experience in working with the NTSB as well as with mass fatality challenges. In fact, a number of local, state and federal responders to United Flight 93 had worked at the Pittsburgh crash scene as well. Thus, they had experience with this type of incident as well as with working with the need for intergovernmental cooperation.

The personal knowledge and trust of fellow responders did impact the ease with which the local responders coordinated and operated at the site. For example, the standard operating procedure for an EMS response is that the PSP will respond to the scene to handle security and safety issues as well as investigative matters. The local paramedics and fire personnel have extensive experience working with PSP Troopers and have respect for their capabilities. Likewise, the PSP personnel understand the roles and responsibilities of the local emergency responders. This enhanced the smooth initial response at the site. Once it was determined there were no survivors, the PSP immediately established perimeter security and began to move unnecessary personnel out of the immediate area. They worked cooperative with the local fire departments who extinguished small brush fires in areas adjacent to the immediate impact zone. As one paramedic put it: "We might have some differences, but when we get to a scene we put all those differences aside and everyone works together." The essential element of this and other conversations was that the local and state responders were familiar with one another and respected the professional capabilities of their fellow responders. They trusted that others would do their jobs in a competent and professional manner.

Another element of trust emerged with the immediate confidence on the part of Somerset County Emergency Management Agency that the Salvation Army and the Red Cross would take care of all of the required mass feeding. They never doubted that this would be handled. On the other side, a representative from the Salvation Army expressed that he knew if they needed anything they couldn't get themselves, they could "Rely on Rick (Lohr) to get it for us." Everyone relied on the Pennsylvania State Police to provide security and never worried about that component of the operation. They had worked with these individuals in the past and knew they would handle their responsibilities professionally.
The designation of the crash site as a federal crime scene made the response event somewhat unique for the local and state responders. The coordinated response and recovery activities among the various local and state agencies proceeded smoothly, according to the plans that were in place. The initial perception of the FBI by several of the local responders was that the local coordination was working well and the FBI were just doing their thing without really working with the locals. Federal interagency cooperation appeared to be coordinated; however, there were initial rough spots between the federal and local responders.

An example of how trust had to be better learned on the scene when there was no prior experience with it is that while the FBI was very receptive and supportive of the services of the Salvation Army, they did not initially recognize the need to have a canteen deliver to the personnel working at the recovery point of the crash site. Their concern was especially strong prior to the discovery of the flight recorder that has high evidentiary value. Once the need and the benefit of hot food "and a smile" was explained in terms of human performance and reduction of errors at the scene, and they had the opportunity to observe and obtain feedback about the truth of this position, the FBI became even more supportive of the modes of providing service as well as of the service in itself.

While local responders had worked with federal agencies such as FEMA, the NTSB, and even the SBA in the past, they had not worked with Federal Law Enforcement agencies such as the FBI and BATF. Likewise, while the FBI has worked with local and state law enforcement agencies, they were not accustomed to working with fire, EMS, emergency management, and non-profit organizations under these conditions. Thus, this became a learning situation.

The federal presence did impact the overall operation, but there was a level of interaction and ongoing cooperation among the local responders that remained independent of the federal oversight entity. The local responders seemed to understand the role and responsibility of the federal responders better than the federal (FBI) responders understood the local roles and responsibilities. This failure to understand how their actions during the response and immediate recovery prior would impact local responsibilities in the longer term seems to have extended to other national responders such as the American Red Cross. For example, The Aviation Disaster Family Assistance Act of 1996 establishes a Family Care and Mental Health Victim Support Team and designates the American Red Cross as the responsible entity. Thus, when the families of the passengers on United Flight 93 arrived on the scene in the first week following the incident, the Red Cross cared for the needs of the families and was the go between for all agencies and family members, trying hard to shield them from unwarranted contact with other agencies, especially the news media. Recognizing the appropriate nature of these actions, the County Coroner, who is designated as the Medical Examiner under the same act, did not attempt to contact the families directly, but asked the Red Cross personnel to let the families know he was available to meet with them at any time. The coroner also asked Red Cross to share the families his contact information so that they could contact him directly as they wished since once the federal recovery operation was over, he would be in charge of final disposition of the remains. However, this information was never communicated to the families, resulting in aggravation and extra effort expended on the part of both family members and the local coroner.
Perceptions presented during the first 36 hours changed significantly during follow-up interviews held with local responders six weeks later. Basically, as the FBI began to understand the various roles of the other response agencies and why they did things the way they did, their attitudes and positions shifted. This is a new role for the FBI and one that may reoccur with more frequency in the future. The FBI demonstrated the ability to learn new methods of intergovernmental operation and cooperation; it is hoped that they will be proactive and share this understanding among their personnel prior to more field experiences such as that in Somerset County.

Likewise, the local agencies and response and recovery personnel gained an understanding of some of the reasons why the FBI approached recovery matters as they did. They understood the principle that this was a crime scene and that the major focus of the FBI was to recover evidence, but it was only as the operation proceeded that they began to understand more fully what that meant in terms of specific operation protocol and preferences. Thus, this was a learning situation in both directions. Supervisors of the local operations recognize the benefits and contributions made by the FBI, which enhanced the local response and recovery efforts. Examples of these include the completion of the memorandum of understanding with HHS, which enabled the deployment of the DMORG team and the assumption of many of the expenditures associated with the recovery operation. This latter was extremely important since no federal disaster relief monies were available since this site never received a presidential declaration of disaster. In this instance, the FBI demonstrated an understanding of the situation of the local jurisdictions and offered support that they otherwise would not have received.

In terms of intergovernmental cooperation in non-metropolitan local areas, the response to the United flight 93 crash in Shanksville on September 11, 2001, demonstrated that it can and does work well in times of crisis. However, it worked because the foundation was in place ahead of time. Small town, borough, and small city emergency response agencies, both paid and volunteer, have worked together to enhance the services they provide to the citizens of Pennsylvania. Thus, cooperation and coordination in advance is the key to effectiveness in emergencies. This indicates the ongoing cooperation among intergovernmental agencies in order to maximize resources and support existing expertise is a logical and viable practice in all aspects of emergency response.

Yes, the exercise and training among the emergency responders prior to the disaster on September 11, 2001, did make a difference in the response in Shanksville, Pennsylvania. Preparing disaster does impact the operation of the response to and recovery of a disaster scene. In answer to the second research question, yes, working together and exercising response plans builds trust. There were stronger bonds of trust forged between and among responders who had worked together before than among those who had not had the opportunity to work together. Thus, given that the presence of the some of the federal agencies on scene in this instance are not standard for natural hazard disasters, such as the FBI, NTSB, and BATF, there was unfamiliarity and, therefore, discomfort associated with the initial cooperative working with these agencies. However, trust built during the longer term of the response and recovery operations and trust was solidified among those who held it at the onset.

A third component of the initial research was to examine the degree to which behavior conformed to the theory of convergence during a consensus crisis. The concept of convergence
has been discussed in both collective behavior and disaster texts since the mid-fifties (Fritz & Mathewson, 1957). Convergence refers to a mass movement of personal, informational and material resources into a disaster site in the hours and days following the event. The intent of the final analysis of this component is to detail the degree to which the events at the response site in Shanksville conform with the characteristics of volunteer behavior in consensus crisis as outlined by Quarantelli and Dynes (1976).

Who were the volunteers in Shanksville? It is important to remember that the role of a 'volunteer' does not necessarily imply a haphazard or unannounced arrival at a disaster site. Many, if not most of the volunteers present at the Shanksville site were activated using emergency response procedures.

To date, up to seventy-four different agencies have been involved in some way in the recovery efforts (Daily American, 9/21/01). Up to 1,118 people were working on the site during the first 13 days of the recovery/crime scene investigation. This number included federal, state and local paid employees. This number also included paid volunteers, activated private citizens who become paid volunteers, unpaid volunteers and volunteers involved in support functions who converge on a scene. Other volunteers may converge on a scene through their proximity to the event; these people might live next door to the site, might have been driving by at time of impact or may possess local information that is required in the first few post-impact hours of response. For example, Shanksville community members traveled the crash perimeter from the time of impact through nightfall to dawn bringing food to the state troopers guarding the site. Community volunteer members began the process of establishing a number of memorial tribute areas - gestures noted by grateful bereaved family members (Daily American, September 13, 29, 2001).

Initial review of the presence of key characteristics reveals the following characteristics of the volunteers in Shanksville and how they match the convergence characteristics. Further detail will be examined in subsequent reports.

As mentioned elsewhere, personal, material and information converged on the scene as expected on September 11, 2001. However, once the lack of survivors was confirmed the goals and objectives for site management changed from one of rescue to recovery. Additionally, when it was obvious that the Shanksville site had the potential to yield the most evidence regarding the perpetrators of the day's activities, the entire area was quickly designated a crime scene with federal and state oversight. This is in keeping with characteristic broad agreement on goals and objectives shared by volunteers in consensus crisis behavior.

The perceived social impact of the event combined with an increased propensity towards altruistic activities is likely to result in a leveling of social distinctions during the emergency period are likely to facilitate participation by broader segments of the community. Community volunteers in collaboration with the United disaster support group and the American Red Cross worked quickly with every level of the community to produce a community memorial service in Somerset on September 14, 2001. It became very clear to the researchers who observed this ceremony that the entire community was united in an expression of grief for the family survivors and that there was also a need to express gratitude for saving their community from further loss.
of life. Community volunteers, irrespective of occupation or status donated their time and resources to respond to multiple requests during this period. As the School Superintendent Gary Singel said, "We thought we lived in a place that was almost untouchable" (Gibb, Pittsburgh Post-Gazette, 9/13/01).

Altruistic norms on the part of volunteers and the community were evidenced early on. From the time that volunteers and paid personnel arrived on the disaster site, a message was quickly communicated that the site was to be secured and preserved in memory of the forty four lives that had been lost in this tragedy. A number of civilians reached the site prior to the arrival of the emergency response groups. Once the state police crews and FBI arrived, the area was secured as a crime scene and all media and non-essential personnel were ordered to leave the scene (Daily American, September 13, 2001).

Response to the initial crash was a disappointment for many of the volunteer emergency response personnel. Keith Custer, a member of the Shanksville Volunteer Fire Company, said, "I thought we'd get there and there would be a big plane on fire and victims……but you get there and there are just little pieces. Now, I don't want to see anything like that again, seeing that massive loss of life" (Gibb, Pittsburgh Post-Gazette, 9/13/01).

Increased identification with the community is demonstrated by cooperative community action in effort to solve problems created by the crises and alteration of community priorities and values. The residents of the small town of Shanksville, an estimated population of around two hundred and forty five, report that, two weeks after the event, they feel more close-knit as a community with a greater sense of pride than before. (O'Brien, The Daily American, September 27, 2001). Shanksville Fire Chief Terry Shaffer expressed his gratitude to the community and indicated that his group had received nothing but praise from the FBI and the Pennsylvania State Police on how the volunteers had handled themselves, not only as a fire company, but as a community.

This community identification also led to an enhanced concept of the role of citizen as Shanksville residents expressed their patriotism and collective grief in the days following the disaster. Judi Baeckel led a drive to erect a memorial to the victims in their front yard on Bridge Street because the residents wanted to make sure that Flight 93 was not forgotten. Memorials, displays of American flags and yellow roses were erected in and around the crash site and Somerset county. Community members traveled the crash perimeter from nightfall to dawn bringing food to the state troopers guarding the site. Community members began the process of establishing a number of memorial tribute areas - gestures noted by grateful bereaved family members. The Somerset community prepared an early public memorial service for the family members of the victims who arrived in the area hours after the crash. The memorial was conducted on the Somerset Courthouse steps Friday September 14th.

Initial review of the information collected supports the expectation that the Shanksville event would fulfill the criteria necessary to confirm the 'convergence crisis' process as outlined by Quarantelli and Dynes. Further analysis is expected to reveal additional evidence supporting this finding.
CONTINUING RESEARCH QUESTIONS

There are a number of continuing research questions that are emerging as this research project continues. These are presented below with a brief explanation of how they relate to the United Flight 93 crash.

A. What aspects of planning and exercise prove most beneficial in disaster response? Evidence supports the positive impact of comprehensive, intergovernmental and interagency emergency response preparedness. However, we still do not know if there are specific components of the preparedness process that are more beneficial than others or if there is an integrative aspect that is key.

B. 1. What local resources tend to become overwhelmed at what time points in a disaster response and recovery situation? (For examples: Water and sanitation systems were a challenge; as time passed and the chill of fall weather began to set in, hot meals became important.) 2. How and to what extent do local characteristics influence the point at which local resources are overwhelmed? Especially in recovery situations, demands on emergency response operations can exceed local resources available. If it were possible to anticipate such overload points in the cycle of disaster response and recovery, they could be anticipated and addressed. Additionally, local characteristics of the disaster site influence response demands. The sparse population and remoteness of this site made the response in Shanksville especially challenging as even lodging for the responders was 25 to 30 miles from the scene and resources for providing food had to be rotated so that local suppliers were not overwhelmed and unable to continue to serve their regular clientele. It is expected that characteristics of other site provide unique challenges as well, but there is no systematic examination of these.

C. How might existing resources be adapted in times of disaster or crisis? (Such as using the National Guard armory as the site for the morgue and the use of Camp Allegheny.) Is it possible to identify such alternative uses in advance and to prepare for such? Traditional resources are usually including in the response capability analysis for a community. In the case of the crash of United Flight 93, however, the traditional resources were not adequate or appropriate to the task at hand. Changes were made both in the resource used and in how the resources were used.

CONCLUSIONS

In conclusion, the crash of United Airlines Flight 93 in Shanksville, Pennsylvania on September 11, 2001 tested the emergency response plans of numerous local, state and federal agencies. The larger research question really is, did they work? Observations and interviews, as well as the results that were reported, indicate that yes, preparedness is a key element in the success or failure of multi-agency and multijurisdictional response to a disaster. In the case of Somerset County, the challenges or drawbacks to enhance response were overcome by the interpersonal trust that was developed over time precisely because of those challenging characteristics. For example, the isolated nature and sparse population of the area mean that everyone had to work
together in small emergencies and therefore developed a history of cooperation and trust. The rural nature of the area was a challenge to the professionals who arrived to participate in the recovery efforts. However, the cooperative, supportive and trusting nature of the local residents compensated for this difficulty and made the operation better.

REFERENCES


July 29, 2002

*hazctr@colorado.edu*