

**COMMUNITY EMERGENCY RESPONSE TEAM
(CERT):
A Realistic Approach Toward Risk Management**

**STRATEGIC ANALYSIS OF COMMUNITY RISK
REDUCTION**

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ABSTRACT

The problem is that the Panama City Fire Department's resources may become initially overwhelmed when impacted by a large disaster. Individuals in our community have become accustomed to quick response times of under four minutes when calling on our department for help. Delayed response times, caused by disasters such as hurricanes, may leave citizens to take care of themselves until emergency responders can arrive. If civilians throughout neighborhoods were educated, organized, and trained to help themselves, family members, and neighbors during major disasters, it could be advantageous to emergency response organizations and citizens as well. Uneducated and untrained individuals with good intentions may compound the situation, possibly placing themselves and others in danger.

Some communities have implemented a Community Emergency Response Team (CERT) Program to help during disaster situations. The purpose of this study was to complete an Applied Research Project directly related to the Executive Fire Officer Program at the National Fire Academy. Evaluative research was used to answer the following questions:

- 1) What is a Community Emergency Response Team (CERT)?
- 2) What are the advantages and disadvantages of a CERT Program?
- 3) Are there any fire service organizations involved with CERT Programs in Northwest Florida?
- 4) Would it be beneficial and cost effective for the Panama City Fire Department to implement a CERT Program?

This research involved gathering data from the National Fire Academy's Learning Resource Center, the Internet, Bay County Public Library, Panama City Fire Department Library, telephone conversations, personal interviews, and written surveys.

The literature review supports that a well designed Community Emergency Response Team (CERT) Program should have more advantages than disadvantages. Since there are no CERT Programs in the Panama City/Bay County area, it could be advantageous for the Panama City Fire Department, as well as area citizens, if our organization implemented a CERT Program.

Further research towards implementing a pilot program would be recommended by this author.

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INTRODUCTION

The Panama City Fire Department is adequately staffed and equipped to handle emergencies regarding our area of responsibility. We have a department that is diversified in fire fighting, public education, and rescue procedures. We also have two specialized teams, a Technical Rescue Team trained in high angle/low angle and confined space rescue, and a Water Rescue Team trained in different types of rescue techniques. Like other public service organizations throughout our country, if the Panama City area is impacted with a disaster of a large magnitude such as a hurricane, our resources may be initially overwhelmed. One example of this was when Hurricane Opal came through the Panama City area in October, 1995. Confronted with problems caused by flooding, fallen power lines, fallen trees, and blocked roads, our department was overwhelmed with emergency calls, even though we had planned and provided additional crews using overtime. A natural disaster, like a hurricane, encompasses such a large area that other surrounding communities and municipalities, whom we share Mutual Aid Agreements with, are also overcome with similar problems and are initially unable to offer any additional assistance to our department.

Because of increased annexations within our City, along with a slight residential increase, our responsibilities to the citizens and their property have also increased. We feel that we are capable, and have a successful past record, of handling day-to-day operations or emergencies. Depending on the magnitude of the disaster, our capability to respond effectively could be several hours or even days. Hurricane Opal overwhelmed our department initially for 48 hours, and delayed us partially because of trees blocking the roadways. These trees delayed response and had to be removed by our department and other City crews. Initial support from citizens who could have provided first aid, fire control, hazard identification, etc., would have been

helpful assistance, prior to our arrival, in this type of situation. One such program that may provide this type of assistance is a Community Emergency Response Team (CERT).

The purpose of this study was to complete an applied research project that may benefit our department and be directly related to the Strategic Analysis of Community Risk Reduction Class, which is part of the Executive Fire Office Program at the National Fire Academy. In addition, it was to specifically answer the following questions:

- 1) What is a Community Emergency Response Team (CERT)?
- 2) What are the advantages and disadvantages of a CERT Program?
- 3) Are there any fire service organizations involved with CERT programs in Northwest Florida?
- 4) Would it be beneficial and cost effective for the Panama City Fire Department to implement a CERT Program?

This study used an evaluative research methodology to collect data. Telephone calls were made to subject experts, literature was reviewed, and written surveys were used to assist in answering the above questions.

BACKGROUND AND SIGNIFICANCE

The Panama City Fire Department became a fully paid fire department in 1932 and has been equipped and staffed by the City Administration to what they feel is an effective fire fighting department. The department grew to a maximum of six fire stations in 1986, with a staff of ninety-seven employees. In 1996, the department was downsized to our present five stations, and we now have a total staffing of eighty-four. The City of Panama City has also annexed approximately 6,000 acres of additional property during the last five years. The department's

average response time for the first arriving unit was 3.45 minutes in 1998. This is consistent with the past five years' average response time of less than four minutes.

The past and present attitude of our City Government is that we are adequately staffed and equipped to provide an effective level of service to our citizens. Although this is certainly true for day to day operations, this does not hold true when impacted by a large disaster such as a hurricane. We would be even more overwhelmed today than in the past because of less staffing and additional annexations. Our response time during a major disaster has been delayed in the past and could certainly be delayed in the future by minutes, if not hours, according to the scale of disaster encountered.

In general, more growth has occurred in the coastal areas of Florida, and the population has more than doubled in the last forty years. The Panama City area is no exception to this. We are heavily populated in the coastal areas and with increased annexations, it places more people and property at risk when confronted with a major disaster such as a storm or hurricane. It also places more of a burden initially on emergency response agencies because of the tremendous increase in emergency calls due to wind and water surge damage. From 1985 to 1998, eight hurricanes and one unnamed storm have affected our area. The present administration of the Panama City Fire Department understands that to be more effective to our citizens during a large disaster, and to stay within our operating budget, we cannot do it alone. We must work more closely with the citizens, elected officials, the private sector, and the public sector to better prepare for large-scale disasters. We could accomplish this through planning and training in our community.

In the last four years, the attitude and direction of our department has changed to a more proactive than reactive approach. Much more can be accomplished for the community if we continue in this proactive direction.

This researcher first became aware of a program called Community Emergency Response Team (CERT) through an article provided by the department's Public Educator. This article briefly described a program that the Cape Coral Fire Department implemented that trains citizens to provide aid and help neighborhoods be self-sufficient and better prepared during an emergency, until professional responders arrive on the scene. A workable program such as Cape Coral's could possibly be one system that the Panama City area would benefit from, by supplementing our emergency services during the initial critical hours or days following a destructive disaster.

In reality, it is not feasible or cost effective for emergency service organizations to be staffed and equipped to handle every situation it may encounter, but by taking a proactive approach instead of a status quo or reactive approach, we will be better prepared for future emergencies. Through this research, this author will decide whether implementing a CERT Program in our area would be beneficial and cost effective to our community. Researching risk management of this type is directly related to the latest course, Strategic Analysis of Community Risk Reduction, attended at the National Fire Academy by this researcher.

LITERATURE REVIEW

The literature review involved material reviewed at the National Fire Academy's Learning Resource Center, the Internet, material provided by the Panama City Fire Department Library, and the Bay County Public Library. Resources included material provided by Robert Majka, County Emergency Disaster Coordinator/Fire Chief for Bay County, and various books, trade journals, and research reports related to the subject. Material was reviewed from surveys that were mailed to twenty-five fire service organizations in the Florida, Georgia, and Alabama area. Telephone interviews were conducted with Martin Bishop, Emergency Management Coordinator for the City of Tallahassee; Bill Firestone, Community Emergency Response Team (CERT) Coordinator with the Florida Division of Emergency Management; Sam Isenberger, Technical Specialist/CERT Coordinator with the Federal Emergency Management Institute; Carolyn Nelson, Emergency Management Coordinator/CERT Coordinator for the Cape Coral Fire Department; and David Ammerman, Chief Drafting Technician with the Engineering Department of the City of Panama City. A personal interview was conducted with Robert Majka, County Emergency Disaster Coordinator/Fire Chief.

A major concern for the residents of Florida, and more specifically the Panama City/Bay County area, is the possibility of being impacted by the effects of a major storm during the yearly hurricane season or any other major disaster.

Most Floridians accept the fact that hurricanes come with the territory, just as Californians live with earthquakes. Fortunately, with hurricanes, we have the benefit of advance warning and preparation (Barnes, Frank, 1998, pg. 309).

The rapid growth Florida has experienced in recent years has increased its vulnerability to destructive hurricanes. From the building boom of the 1920's through the explosion of

growth in recent decades, many of Florida's residents have come to live and work in hurricane-prone areas near the coast. Between 1960 and 1980, the state's population doubled, and today more than 14 million people call Florida home. With this increase in population came more homes, highways, and structures of all kinds that could suffer from the advances of a major hurricane (Barnes, Frank, 1998, pg. 2).

In the past ten years, the City of Panama City has annexed approximately 6,000 acres of land (David Ammerman, telephone interview, October 4, 1999). Along with these increased annexations comes additional responsibility for our organization.

"Florida has always been vulnerable to hurricanes, but the explosive growth that has occurred in the last few decades has made the coastal areas even more precarious" (Barnes, Frank, 1998, Foreward).

No location in the State of Florida is further than 75 miles from coastal waters. Bay County has an estimated population of 145,000, projected to reach 150,000 by the year 2000. The County has a large summer tourist season because of visitors to our beaches. Panama City is the largest of eight municipalities within the county, with approximately 38,000 residents and a daily workforce/tourist population of approximately 80,000. The population density of Bay County is ranked 25th out of 67 Florida counties. Panama City shares a portion of Bay County's 27 miles of coastline on the Gulf of Mexico (Bay County Comprehensive Emergency Management Plan, June 1999, pg. BP-9).

Our people, infrastructure, and environment are vulnerable to many different types of hazards and disasters, such as hurricanes, tropical storms, tornadoes, lightning, fires, coastal flooding, and transportation incidents.

Because of the geographic location of our area, Panama City has been directly impacted by eight hurricanes and one unnamed storm since 1985 (Bay County Records, Hurricane History Database). The Panama City/Bay County area is brushed or hit by a major storm or hurricane every 3.52 years. Statistically this area should be affected again, to some extent, before the end of hurricane season 2002 by another of these potential disasters (Williams, Hurricane City Web Page, August 1999).

According to the American Red Cross (1996), a disaster is defined as an occurrence such as a hurricane, tornado, storm, flood, high water, wind-driven water, tidal wave, earthquake, drought, blizzard, pestilence, famine, fire, explosion, volcanic eruption, building collapse, transportation accident, or other situation that causes human suffering or creates human needs that the victims cannot alleviate without assistance.

The CERT Participant Handbook (FEMA, May 1994, pg. I-3) defines a disaster as, “any event that overwhelms existing resources to deal with the event.”

The damage caused by natural disasters such as earthquakes, hurricanes, tornadoes, and flooding affects all elements of society and government. Catastrophic events:

- Severely restrict and overwhelm our response resources, communications, transportation, and utilities.
- Leave many individuals and neighborhoods cut off from outside support.

It takes time for emergency response agencies to set up and prepare for an organized effort, and damaged roads and disrupted communication systems may restrict their access into critically affected areas. Thus, for the initial period immediately following a disaster-often up to 72 hours or longer- individuals, households, and neighborhoods may need to rely on their own resources for:

- Food
- Water
- First Aid
- Shelter

Individual preparedness, planning, and survival skills and mutual aid within neighborhoods and worksites during this initial period are essential measures in coping in the aftermath of a disaster (FEMA CERT Participant Handbook, May 1994, pg. xv).

Being a coastal community in Florida, hurricanes, and storms associated with them, are a major concern of ours when we think of disaster. However, other types of disasters such as a transportation incident, where a train derailed in 1978 causing eight deaths because of a leaking tank car of chlorine, overwhelmed local responders initially (Robert Majka, personal interview, August 25, 1999).

According to the Bay County Comprehensive Emergency Management Plan (June 1999), other types of potential disaster causing agents that could affect the Panama City/Bay County area are flooding, wildfires, hazardous materials, lightning, sinkholes, coastal oil spills, commercial nuclear power plants, armed violence/military conflict, epidemics, and others (pgs. BP-9 – 13).

Another potential disaster is terrorism. According to James P. Smith, acts of terrorism can not only have devastating effects on citizens, but on emergency responders also. He states that resources on the disaster scene will certainly be overwhelmed if harmful chemicals are used (Smith, June 1999, pg. 20).

Preparedness requires continual public awareness and education programs to ensure citizens will take appropriate actions in advance of an emergency or disaster, to reduce

their vulnerability, especially during the first three days (72 hours) after disaster impact (Bay County Comprehensive Emergency Management Plan, June 1999, pg. BP-14).

The Panama City Fire Department would be no exception if called to respond to a major disaster. The department's average response time in 1998, for the first responding unit, was 3.45 minutes (Panama City Fire Department Annual Report, January 1999). Emergency response times for the department have been under four minutes for the past four years. It is rare for the first responding unit to arrive later than four minutes on emergency incidents during day to day operations. In 1995, during Hurricane Opal, our emergency response crews were delayed for much longer periods of time because of a tremendous increase in emergency calls due to fallen power lines, flooding, trees blocking roadways, and other obstacles. Response times of fifteen minutes were not uncommon during this time. These delays lasted in part for forty-eight hours.

None of us have all the answers or resources that we would like. Although we are called fire departments or fire districts, the fire problem is a community problem. Who suffers from the devastation of fire? The community does.

For many years, fire agencies have tried to go it alone. Some still say, "The fire department will handle it because it deals with fire." Too many times we keep asking the same question over and over, but no more. We need to "social shock" our thinking. We are overlooking questions and concerns that others may have.

Forming partnerships is not a new idea. It has been around for a while, but the fire service has never really used it (Reith, August 1999, pg 58).

Most people are not prepared to deal with even minor medical emergencies encountered in daily life, let alone situations that may be caused by disasters. During the aftermath of a major disaster, citizens will come forth to help each other because of delayed arrivals of trained

emergency response crews. When people are untrained and respond to help themselves and each other, they are placing themselves, and others, at further potential risk up to and including death. This was evidenced during Hurricane Andrew where emergency crews were quickly overwhelmed causing delays of hours and even days (Bishop, City of Tallahassee Web Page, September 1999).

Martin Bishop relates to one particular impacting study that was released in June, 1990 by the Urban Institute of the University of North Carolina at Charlotte. This study focuses on lessons learned when Hurricane Hugo struck Charlotte, North Carolina after traveling over 200 miles inland and maintaining hurricane force winds. The damage this hurricane caused was estimated to be in the hundreds of millions of dollars. “Emergency plans must find ways to incorporate citizens, a tremendous resource... find ways to increase citizen participation. More training in emergency response is needed, not only for public employees, but for all segments of the community” (Bishop, City of Tallahassee Web Page, September 1999).

Following a major disaster, first responders who provide fire and medical services will not be able to meet the demand for these services. Factors as number of victims, communication failures, and road blockages will prevent people from accessing emergency services they have come to expect at a moment’s notice through 911. People will have to rely on each other for help in order to meet their immediate life saving and life sustaining needs (Isenberger, FEMA Web Page, September 1997).

A program to help citizens help themselves may be one method that a community may use to help reduce injury, death, and property damage during a major disaster. One such program being utilized by different communities nationwide is the Community Emergency Response Team (CERT) Program.

A CERT is a group that is organized and receives special training that enhances their ability to recognize, respond to and recover from a major emergency or disaster situation.

CERT is about readiness, people helping people, rescuer safety, and doing the greatest good for the greatest number. CERT is a positive and realistic approach to emergency and disaster situations where citizens will be initially on their own and their actions can make a difference. Through training, citizens can manage utilities and put out small fires; treat the three killers by opening airways, controlling bleeding, and treating for shock; provide basic medical aid; search for and rescue victims safely; and organize themselves and spontaneous volunteers to be effective (Firestone, Florida Division of Emergency Management Web Page, 1999).

According to the Federal Emergency Management Agency (FEMA), properly organized and trained teams, whether from neighborhood associations, workplaces, or other organizations, can be an effective tool for pre and post disaster incidents. These citizens can be educated, trained, and organized into CERT teams in seven sessions, totaling 17.5 hours. Once organized and trained, these teams are better prepared to help themselves, family members, and other individuals prior to the arrival of professional responders. This helps strengthen the entire emergency management system of a community (FEMA, CERT Participant Handbook, May 1994, pg. xvi, xvii).

The CERT concept was developed and implemented in 1985 by the Los Angeles City Fire Department (LAFD). The Whittier Narrows earthquake in 1987 further confirmed that an educated and properly trained group of citizens could be beneficial to their community in helping to meet their immediate needs (Isenberger, FEMA Web Page, September 1997).

In an Applied Research Project submitted to the National Fire Academy by Fire Chief Richard Minor (December 1996, pg. 17), he reported that within five minutes after the Whittier Narrows earthquake began, the Los Angeles Fire Department's emergency medical resources were depleted. Fifteen minutes into the disaster, their dispatch section was backlogged with emergency calls requesting fire suppression and rescue. After being reminded how quickly emergency resources can be overwhelmed, the Mayor, a Council member, the Fire Chief, and Assistant Fire Chief were key participants in the formation of a CERT program for the City of Los Angeles, California.

In an article by Kerry Bludworth, (The Connection, Winter 1998), he states that CERT is the greatest public safety tool that he has been exposed to in his twenty-five years of public service. Mr. Bludworth was instrumental in helping his department, the Orlando Fire Department in Orlando, Florida, design and implement a CERT Program which became the East Coast model. This model was developed from the West Coast model with a portion of the program being redesigned focusing on hurricanes, which plague Florida, instead of earthquakes.

In an article from Florida Fire Service Today (February 1998), Carolyn Nelson, Emergency Management Planner for the City of Cape Coral Fire Rescue and Emergency Services, Cape Coral, Florida, states that their department realized in the mid 1990's that they could be severely overwhelmed if confronted by a disaster such as a tornado, tropical storm, or hurricane. "Since not all affected individuals can be reached immediately, residents should be prepared, trained, and able to take care of themselves, their family, and, hopefully, assist their immediate neighbors" (Nelson, February 1998, pg. 14). The Cape Coral CERT Program was officially implemented in 1997 after some of their department members were trained by the

Orlando Fire Department, and other department members were sent to a Train-the-Trainer class at the Federal Emergency Management Institute in Maryland.

In a telephone interview with Carolyn Nelson, she states that their CERT program has received a good response from the citizens in Cape Coral, Florida. She feels that it has created a terrific rapport with the citizens and has put their department in a much better position to save lives when confronted with a large disaster. Some disadvantages with the program include lack of adequate funding, the program is too labor intensive and has become a full-time job for her, and it is difficult to maintain interest among some members and employees who help train them (Carolyn Nelson, telephone interview, August 19, 1999).

In a telephone conversation with Martin Bishop, Emergency Management Coordinator for the City of Tallahassee, he stated that their CERT program would be extremely beneficial and worthwhile for the citizens of Tallahassee, better preparing them for future disasters as well as assisting emergency response organizations. He was not sure if there were any disadvantages to the program, but if there was one, it would be the time commitment to train CERT members and their follow-up training and monitoring (Martin Bishop, telephone interview, October 12, 1999).

In an Applied Research Project submitted to the National Fire Academy, Fire Chief Richard Minor of Loveland, Colorado, discusses doing research to determine how other communities prepared their citizens for large scale disasters when local emergency resources are overwhelmed. A special concern to the citizens of the Loveland area was the incidence of flash flooding. One flood in July of 1996, near the Thompson River area, grew so rapidly that it caused the deaths of 145 citizens. Loveland's potential disaster problems include winter storms, wildfires, earthquakes, tornadoes, and flooding (December 1996, pg. 13). At the completion of his research, Chief Minor recommended to his staff, advisory commission, city management

team, city council, and fire protection district board that a CERT program would be beneficial and should be developed and implemented in the Loveland area (December 1996, pg. 45).

In an Applied Research Project submitted by Ken Grimes (March 1999, pg. 2), he stated that “All areas of our country are subject to natural or manmade disasters with little or no warning.” Grimes further reports that when these disasters occur, citizens are accustomed to quick response from emergency responders who are usually readily available. Unfortunately, these resources are initially less than adequate during large disasters.

The truth is that citizens will mobilize regardless of what the government does.

Therefore, we must determine if we can protect them through training, and at the same time, have them assist emergency management personnel by becoming part of the incident management system (Grimes, March 1999, pg. 3).

During a telephone interview with Bill Firestone, CERT Coordinator with the Florida Division of Emergency Management, he stated that CERT programs are growing in number throughout Florida. Most of the programs are in Central or South Florida brought on by a renewed awareness of how quickly disasters can incapacitate a community after experiencing the massive destruction of Hurricane Andrew. Mr. Firestone related that interest in CERT is beginning to grow in North and Northwest Florida, although he did not know of any CERT Programs in Northwest Florida at this time. Escambia County, in Northwest Florida, has begun efforts to have State CERT trainers teach a CERT Train-the-Trainer Course in their county. He feels that a successful CERT Program is worth the effort, being very beneficial to a community. He also talked of State grant money available that could be used to initiate mitigation type programs such as CERT (Bill Firestone, telephone interview, November 17, 1999).

Bay County is mandated by Federal, State and local law to ensure that mitigation efforts are enhanced, preparedness is encouraged, responsiveness is assured and recovery is achieved efficiently and effectively before, during, and after the impact of a minor, major or catastrophic disaster that threatens Bay County (Bay County Comprehensive Emergency Management Plan, June 1999, pg. i).

The primary responsibility of the Bay County Department of Emergency Services is to develop a local Comprehensive Emergency Management Plan (CEMP). This plan addresses, as much as possible, all emergency response functions of local governmental agencies and organizations, public officials, and other public and private organizations during disasters (Bay County Comprehensive Emergency Management Plan, June 1999, pg. i).

“When county and municipal resources/capabilities are exhausted; additional resources will be requested through mutual aid agreements and state assistance” (Bay County Comprehensive Emergency Management Plan, June 1999, pg. BP-15). Nothing in the County Emergency Management Plan indicates the existence of a citizen’s emergency management team.

During a personal interview with Robert Majka, County Emergency Disaster Coordinator/Fire Chief for Bay County, Florida, he stated that the County administration has discussed the possibility of implementing a program such as CERT, but nothing has materialized as of this date (Robert Majka, personal interview, August 25, 1999).

In summary, all information gathered concerning this study supports that any emergency service organization, regardless of size or location, can be initially overwhelmed and depleted of resources if impacted by a disaster of a large magnitude. The information also reveals that

although there are disadvantages, a well planned and implemented program will be advantageous to a community's emergency response organization as well as the citizens.

PROCEDURES

A couple of months after returning home from completing the Strategic Analysis of Community Risk Reduction Class at the National Fire Academy, this author was reading some trade journals and came across a small article concerning Community Emergency Response Team (CERT). That was when this author first became aware of an education and training program called CERT. Later on, members of our department were discussing community risk reduction within our area, and our Public Educator presented an article concerning Cape Coral Fire Department's CERT Program. The article prompted enough interest and curiosity to promote this research project.

Many trade journals were reviewed for articles pertaining to CERT or citizen involved response teams. Many pages of useful material were accessed from the Internet regarding CERT programs.

A written survey was developed and mailed to twenty-five emergency fire service organizations on September 30, 1999, (See Appendix A). A total of 20 responses, or 80%, was returned. The population surveyed was between 14,000 and 344,000, and mainly included departments in Florida, with limited departments surveyed in Alabama and Georgia. These departments were selected because of their geographic location in relation to the Panama City area, with emphasis placed on Florida cities because of their susceptibility to hurricanes. The

purpose of this survey was to find out if any of these fire service organizations were involved in a CERT Program, and if they were, to answer the following questions:

- 1) Have you implemented a Community Emergency Response Team (CERT) Program within your organization?
- 2) What do you consider your community's biggest potential threat(s)?
- 3) Please check the agencies that assisted you in setting up the CERT Program?
- 4) Please list the name of the agency that provided the most assistance in the actual development of your program (Example: ACME Fire Department)?
- 5) What citizens are being taught your program?
- 6) Who teaches the CERT Program?
- 7) Please check all sources of funding for your CERT Program.
- 8) What was the total cost to implement the CERT Program?
What is the annual budget cost to continue the CERT Program?
- 9) What are the advantages of the CERT Program?
- 10) What are the disadvantages of the CERT Program?

Four individuals were interviewed by telephone and were chosen because of their knowledge and expertise in CERT Programs at the local, State, and Federal level. One individual was personally interviewed in our area because of his expertise in disaster preparedness and mitigation. Another individual was interviewed by telephone because of his knowledge of mapping, property annexations, and statistical data related to City property.

A telephone interview was conducted with Ms. Carolyn Nelson, Emergency Management Coordinator/CERT Coordinator for the Cape Coral Fire Department, on August 19, 1999. The interview began at 1:30 p.m. and concluded at 1:50 p.m.

The following questions were asked Ms. Nelson:

- 1) How did the Cape Coral Fire Department get started with the CERT Program?
- 2) What do you feel are the advantages and disadvantages of the program?
- 3) How is your CERT Program funded?

On August 24, 1999, telephone calls were made to the other seven municipal fire departments in the Bay County area, as well as four other municipal fire departments in Northwest Florida. These municipalities include the Callaway Fire Department, Cedar Grove Fire Department, Lynn Haven Fire Department, Marianna Fire Department, Mexico Beach Fire Department, Ocean City/Wright Fire Department, Panama City Beach Fire Department, Parker Fire Department, South Walton Fire Department, Springfield Fire Department, and the Town of Cedar Grove Fire Department. Each telephone call lasted approximately five minutes. These organizations were asked if they currently have a CERT Program in operation.

On August 25, 1999, a personal interview was conducted with County Emergency Disaster Coordinator/Fire Chief Robert Majka. This interview began at 1:30 p.m. and concluded at 2:30 p.m.

The following questions were asked Mr. Majka:

- 1) Does Bay County have any citizen involved emergency response teams such as a CERT program?
- 2) What resources are available for funding a CERT program?
- 3) Do you foresee Bay County implementing a CERT program in the near future?

On October 4, 1999, a telephone interview was conducted with David Ammerman, Chief Drafting Technician with the Engineering Department of the City of Panama City. The call

began at 2:50 p.m. and concluded at 3:00 p.m. The purpose of this interview was to determine how many acres of land the City of Panama City had annexed in the past five years.

On October 12, 1999, a telephone interview was conducted with Martin Bishop, Emergency Management Coordinator for the City of Tallahassee. The call began at 10:30 a.m. and concluded at 10:55 a.m.

The following questions were asked Mr. Bishop:

- 1) Does the City of Tallahassee have a functioning CERT Program?
- 2) What do you feel are the advantages/disadvantages of a CERT Program?
- 3) Will there be a CERT training program offered to any organizations in Northwest Florida in the near future?
- 4) Do you know of any CERT Programs in Northwest Florida?

On November 12, 1999, I contacted the Learning Resource Center at the National Fire Academy and was informed that there were two Applied Research Papers on file regarding the CERT Program. Working with the Bay County Library, I obtained both of these papers through Interlibrary Loan.

On November 17, 1999, a telephone interview was conducted with Bill Firestone, CERT Coordinator with the Florida Division of Emergency Management. The interview began at 9:00 a.m. and concluded at 9:20 a.m.

The following questions were asked Mr. Firestone:

- 1) What CERT training programs are there at the State level?
- 2) Are there any functioning CERT programs in Northwest Florida?

On November 18, 1999, I conducted a telephone interview with Sam Isenberger, Technical Specialist/CERT Coordinator with the Federal Emergency Management Institute. The call began at 1:30 p.m. and concluded at 2:00 p.m.

The following questions were asked Mr. Isenberger:

- 1) How does the CERT Program work at the Federal level?
- 2) What is the structure of the CERT Program?
- 3) What is the scheduling, availability, cost, and duration of the Train-the-Trainer classes offered by FEMA?
- 4) What is the funding cost for implementing a CERT Program?
- 5) What are the advantages/disadvantages of a CERT Program?

One of the limitations of this research was that very little written documentation was available pertaining to the disadvantages of CERT Programs, or pertaining to CERT Programs being evaluated after actually being utilized during a disaster. Other limitations were this author's inexperience in developing surveys that produced less than desirable results. A better-developed survey could have been more beneficial for this study. Funding information provided on the written surveys was also very limited. In addition, the National Fire Academy's Learning Resource Center had limited documentation of applied research projects related to CERT.

RESULTS

In summary of the written surveys, twenty-five were sent out; the majority of the department's were paid; the size of the department's ranged from 51 to 500 employees, with only one department having over 500 employees; the population served ranged from 14,000 to 344,000; and the area protected ranged from five to 1,600 square miles. Five out of twenty-five surveys sent out were not returned. Twelve surveys were returned with a "no" response, and eight were returned with a "yes" response. The biggest threat to the organizations responding "yes" were hurricanes, tornadoes/storms, and flooding. Surveys indicated that assistance in helping set up CERT Programs was received from city, county, state, and federal agencies, with the majority coming from state and county agencies. The surveys also indicated that the majority of citizens being taught the program resided both inside and outside the organization's response area. (See Appendix B for detailed results of the written surveys.)

In response to the first question, What is a Community Emergency Response Team (CERT): a CERT is a group of citizens (neighbors) that have been organized, educated, and trained to enhance their ability to recognize, respond to, and recover from a major emergency or disaster situation. CERT is about people helping people in situations where citizens will be on their own initially for the first few hours or days, depending on the magnitude of the disaster, until professional emergency responders can get to them.

The Los Angeles Fire Department developed and implemented the CERT Program to help their citizens deal more effectively with disaster after the Whittier Narrows Earthquake of 1987. The City of Los Angeles coined the acronym "CERT" as Community Emergency Response Team. FEMA, believing the material to be applicable to all hazards, adopted and expanded the program making it available nationally in 1993.

The East Coast CERT was established when the Orlando Fire Department was trained by Los Angeles Fire Department members, then tailored the program towards hurricane disasters, instead of earthquakes, and implemented the program in their Florida community in 1994.

Since then, programs have been established in several Central and Southern Florida communities. The program is also slowly gaining awareness and interest in North and Northwest Florida.

“What are the advantages and disadvantages of a CERT Program?” In summarizing advantages, telephone interviews pertaining to this study produced very similar results. Advantages given by the interviewees include the program is a good public relations tool for the sponsoring organization; it creates a better awareness within the community and a better rapport between the citizens and public service organizations; and it creates better educated and trained individuals to help themselves and their neighbors in case of a disaster. Trained and organized citizens of CERT are also a help to other emergency responding organizations by supporting their neighborhoods prior to emergency response arrival. A CERT Program builds better neighborhoods by bringing individuals together and changes overall behavior to a more positive direction concerning disaster preparedness.

Concerning the written surveys, there was approximately twice as many advantages listed in comparison to the disadvantages. Many agreed that advantages were having volunteers ready to assist in an emergency, having improved relations among the citizens in the community, and knowing that a team of individuals were trained to assist in the event of a disaster.

Disadvantages to the CERT Program received from the telephone interviews were that it could be very labor intensive. Examples include program development, training instructors,

recruitment of CERT members, instructing members, record keeping, monitoring, and continued program upkeep. The other most prevalent disadvantage given was funding.

Some common disadvantages according to the written surveys were time constraints and lack of funds.

Are there any fire service organizations in Northwest Florida involved with CERT? Telephone surveys and conversations, written surveys, a personal interview, and written material reviewed revealed that there are no functioning CERT Programs in Northwest Florida at this time. Although a limited number of surveys were sent to Southern Alabama and Georgia, our neighboring states, the responding agencies revealed no such programs in existence, with the exception of the Dothan Fire Department of Dothan, Alabama, who indicated that they have an informal program.

One unexpected finding was about the program in Tallahassee, Florida. According to data obtained from the Internet, the City of Tallahassee appeared to have implemented a comprehensive CERT Program that was taught by members of the fire, police, and other city departments. However, the written survey returned by the Tallahassee Fire Department indicated that they had no such program. This prompted a call to Martin Bishop, Emergency Management Coordinator for the City of Tallahassee. Mr. Bishop explained that their program had been put on hold for one year so that logistical problems could be worked out.

Would it be beneficial and cost effective for the Panama City Fire Department to implement a CERT Program? The information collected from this study clearly supports the need for a CERT Program in the Panama City area. Our area's history of being directly impacted by storms and hurricanes and the record number of emergency responses during these times, coupled with the possibility of other types of disasters that could impact the area, support

the need for such a program. All responses received from personal interviews, telephone conversations, and written surveys support that a well-designed and implemented program would be beneficial for the Panama City Fire Department as well as the citizens of the area.

In answer to the cost effectiveness of implementing a CERT Program, very little useful information was obtained from telephone interviews and written surveys. The responders all stated that the cost is directly related to the size of the program and that it is usually easier for an organization to implement a program with the help of outside funding sources, i.e. state grants.

According to the written surveys, the total cost to implement the CERT Program and the annual budget to continue the program were inconclusive, with only half the department's answering this question, indicating a wide range from \$5,000.00 to \$46,100.00.

DISCUSSION

The study for this research project indicates that the Panama City Fire Department, as an emergency response organization, is not unique when confronted with a major disaster. Other emergency fire service organizations across the nation, regardless of size, indicate that their resources had or would be quickly depleted and initially overwhelmed if they were impacted by a major disaster.

FEMA states that following a major disaster, first responders who provide fire and medical services will not be able to meet the demand for these services. Factors such as number of victims, communication failures, and road blockages will prevent people from accessing emergency services they have come to expect in a moment's notice through 911 (Isenberger, FEMA Web Page, September 1997).

According to information obtained from an Applied Research Project submitted by Richard Minor (December 1996, pg. 17), five minutes after the Whittier Narrows Earthquake began, the Los Angeles Fire Department's emergency medical resources were depleted, and within fifteen minutes their dispatch section was backlogged with emergency calls asking for fire suppression and rescue.

The Cape Coral Fire Rescue and Emergency Services realized in the mid 1990's that their department could be severely overwhelmed if confronted by a disaster (Nelson, February 1998, pg. 14).

In his study, Ken Grimes (March 1999, pg. 2) states that, "All areas of our country are subject to natural or man-made disasters with little or no warning." When these disasters occur, citizens are accustomed to quick response from emergency responders who are usually readily available, although these resources may be less than adequate initially.

Throughout our country, different areas may be confronted by similar disasters, but have conditions that are specific to their area, such as earthquakes on the West Coast and hurricanes on the East Coast. Regardless of what causes a large-scale disaster, different locations share a similarity in that their emergency responders may be overwhelmed, leaving citizens to fend for themselves for a period of time.

A Community Emergency Response Team (CERT) is one method that can be utilized to strengthen the resources of local emergency response organizations, working together and in conjunction with civilians throughout their community.

The Emergency Management Planner for the City of Cape Coral, Florida feels that their program has had a good response from the citizens in their city and has created a good rapport between the citizens and the department. She feels this has created a stronger team if confronted

with a major disaster in their community (Carolyn Nelson, telephone interview, August 19, 1999).

According to the Emergency Management Coordinator for the City of Tallahassee, Martin Bishop, their CERT program also is beneficial and worthwhile for the citizens of Tallahassee, better preparing them, as well as the emergency response organizations in their community, if faced with a major disaster (Martin Bishop, telephone interview, October 12, 1999).

Information studied from organizations that have implemented a CERT Program in their area or others that teach CERT Programs revealed similar attitudes. These individuals feel strongly that although CERTS have disadvantages, the advantages of the program far outweigh the disadvantages, making it a positive difference for their communities.

In a telephone interview with Carolyn Nelson (August 19, 1999), she states that the program is very labor intensive and that it is hard to maintain interest among some CERT members and also employees of her organization who help train them.

Martin Bishop also says time commitment to train CERT members, their follow-up training, and monitoring may be a disadvantage (Martin Bishop, telephone interview, October 12, 1999).

The written surveys sent out by this author list some advantages of a CERT program as a ready team of volunteers, better community awareness of emergency management, better community preparedness for disasters, additional resources for fire/rescue emergency management, and good public relations for all agencies. Many of the responses to advantages were similar for all organizations.

Most of the responses to disadvantages were similar for all organizations, with the most prevalent disadvantages being funding problems and the program being labor intensive. The amount of funding to implement a CERT is unclear to this author, as it would vary depending on program design. Information obtained during this research revealed that most CERT Programs are funded primarily with county and state funds.

According to this study, many proactive leaders throughout our country have realized that although it may be labor intensive and a challenging program in other ways, a CERT Program has more advantages than disadvantages, making it a worthwhile program for their organization.

I feel that our society has evolved and created the present attitude where our nation, as a whole, has tunnel vision. People nationwide expect the government to take care of them if an emergency strikes. They are accustomed to calling 911 and have emergency assistance arrive in approximately four to five minutes. The emergency response organizations share in this tunnel vision in thinking and accepting that it is their job to take care of every emergency or individual immediately when called upon. We need to realize we cannot handle every situation alone. There will be times when individuals, as well as organizations, need to work in conjunction with each other for their community to be able to do the most good for the most people in the most timely manner possible when faced with a disaster.

I feel that if a CERT Program is carefully designed and implemented well to fit the needs of our organization and community, this could be one method that would effectively strengthen our Comprehensive Emergency Management Plan.

It is evident from my study that many organizations and communities are unaware of CERT, just as this author was before starting this research project. Compared to the numerous communities nationwide, the numbers of CERT Programs implemented, although growing, are

still small in number. This study reveals that most of the organizations that have implemented CERT Programs in their communities are large organizations, serving large communities. If a program such as CERT is beneficial to a large community, such as Los Angeles, CA or Orlando, FL, it would certainly be beneficial to a small community, with even more limited resources.

Developing, organizing, and implementing a CERT Program for our community would certainly be labor intensive for the Panama City Fire Department. Funding would be an obstacle that would have to be overcome. Besides these two major disadvantages, a CERT Program could be a major benefit to our community.

RECOMMENDATIONS

Like other emergency response organizations throughout our country, the Panama City Fire Department has been, and will probably be in the future, initially overwhelmed when impacted by a major disaster such as a hurricane. Our department can be the lead agency in implementing a CERT Program that will help us and our citizens be better prepared if confronted by a large disaster in our community.

First, we must educate and gain the support of our staff and city officials. Further research is needed for a program to be designed and implemented that is not only functional, but will meet the specific needs of our organization and the citizens as well. Such a program can be accomplished by utilizing the FEMA CERT Training Curriculum and sending some members of our department to a CERT Train-the-Trainer Course offered by the State of Florida or FEMA.

If we can overcome obstacles such as staffing time commitments and initial and continued funding, the advantages should well outweigh the disadvantages for our community.

Since no other CERT Programs could be found in Northwest Florida, a program in the Panama City/Bay County area could be the catalyst to encourage other organizations in Northwest Florida, Southern Alabama, and Georgia to implement a CERT Program to help their area as well.

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APPENDIX A

Executive Fire Officer Program Community Emergency Response Team (CERT) Survey

Name of your Department: _____

Is your Department: _____ Paid _____ Volunteer _____ Combination

Size of Department: _____ Less than 50 _____ 51 – 100 _____ 101 – 250
 _____ 251 – 500 _____ Over 500

Size of Population Served: _____

Area Protected (Square Miles): _____

1. Have you implemented a Community Emergency Response Team (CERT) Program within your organization?

_____ Yes _____ No

If the answer is yes, please continue with this survey.

2. What do you consider your community's biggest potential threat(s)?

_____ Fire _____ Flooding _____ Tornadoes/Storms _____ Hurricanes

3. Please check the agencies that assisted you in setting up the CERT Program?

_____ City _____ County _____ State _____ Federal

4. Please list the name of the agency that provided the most assistance in the actual development of your program (Example: ACME Fire Department)?

5. What citizens are being taught your program (Check both if applicable)?
_____ Citizens within your response area
_____ Citizens outside your response area
6. Who teaches the CERT Program?
_____ Members within your department
_____ Members outside your department (If so, please list below)
7. Please check all sources of funding for your CERT Program.
_____ City _____ County _____ Special District
_____ State _____ Federal _____ Private
8. What was the total cost to implement the CERT Program? _____
What is the annual budget cost to continue the CERT Program? _____
9. What are the advantages of the CERT Program?
10. What are the disadvantages of the CERT Program?

The average size population for the Yes response was 159,875
 The average size population for the No response was 101,588

Area Protected (Square Miles)

Yes surveys responded: 116; 63; 101; 970; 314; 1600; 26.4; 85

No surveys responded: 33; 10; 25; 135; 7.5; 3.75; 25; 671; 237; 100; 5; left blank

1. Have you Implemented a CERT Program

8 responded yes; 12 responded no; 5 were not returned

2. Biggest Potential Threat(s)

Hurricanes, Tornadoes/Storms, Flooding, Fire: 2

Hurricanes, Tornadoes/Storms, Flooding: 2

Tornadoes/Storms, Flooding: 1

Tornadoes/Storms, Fire: 1

Hurricanes: 2

Hurricanes: 6 of 8

Tornadoes/Storms: 6 of 8

Flooding: 6 of 8

Fire: 2 of 8

3. Agencies That Assisted in Setting up the CERT Program

City: 1

County: 1

Federal: 1

City & County: 1

City & State: 1

County & State: 1

State & Federal: 1

City, County & State: 1

City: 4

County: 4

State: 4

Federal: 2

4. Agency That Provided the Most Assistance

3 responded FEMA

2 responded Orlando, Florida Fire Department

Others were Seminole County Emergency Mgmt., Marion County Sheriff's Office Emergency Mgmt., Dothan Police Dept., and Pompano Beach Fire Rescue

5. What Citizens are Being Taught:

6 of 8 responded citizens within response area and outside of response area

2 of 8 responded citizens within response area

6. Who Teaches the CERT Program:

6 of 8 responded members within the department

2 of 8 responded members within and members outside the department

7. Sources of Funding:

County: 1

County & City: 1

County & State: 1

City & State: 3

City, State & Federal: 1

County, State & Federal: 1

City: 3

County: 4

State: 4

Federal: 2

8. Total Cost to Implement the CERT Program:

\$46,100.00; \$5,000.00; \$15,000.00/18,000.00; \$7,000.00

Annual Budget to Continue CERT Program:

\$16,420.00; 0.5 FTE and \$5,000.00; \$18,000.00; \$5,000.00 – 7,000.00

Note: Both the cost to implement and the annual budget to continue figures were inconclusive. There were only four cost figures completed in each of these categories.

9. Advantages of the CERT Program:

A ready team of volunteers. (Cape Coral, FL)

To create neighborhood teams to deal with emergency situations during high demand times for city emergency services. (Daytona Beach, FL)

It teaches the citizens of Orlando how to survive for 72 hours in case of a disaster and if the fire department cannot get to them. It will also benefit their families and the community. (Orlando, FL)

More community awareness of Emergency Management.

Better community preparedness for disaster.

Additional resources for Fire/Rescue and Emergency Management. (Alachua County, FL)

Having groups of citizens that can handle incidents prior to F.D./Rescue arriving. (Seminole County, FL)

PR for all agencies.

Good possibility of need for CERT if we are overwhelmed by a disaster. (Marion County, FL)

Reduces community's disaster vulnerability.

Increases F.D. resources.

Improves relationship between F.D. personnel and citizens.

Builds community F.D. support.

Explains F.D. networking tremendously.

Makes us improve ourselves.

Motivates our personnel.

Donations.

Improves interaction between cities and opens up opportunities to do joint exercises. (Pompano Beach, FL Fire Rescue)

Dothan, AL Fire Dept. left this blank.

10. Disadvantages of the CERT Program:

Lack of funding.

Challenge of recruiting students for classes. (Cape Coral, FL)

The cost to maintain training levels of the CERT members. (Daytona Beach, FL)

Staff time for continued training and administration of the program. (Alachua County, FL)

Maintaining an advanced program to keep all interested; we have an association started.
Getting instructors outside our CERT group. (Seminole County, FL)

Takes a lot of time; Began with about 4 teams per year being developed – now we have 8 or so –
can't keep up with it all; has gotten out of hand. (Marion County, FL)

Labor intensive.

Logistically-intense program.

Once started, can never stop. (Pompano Beach, FL)

Orlando, FL Fire Dept. answered N/A.

Dothan, AL Fire Dept. left this blank.