

**AN EVALUATION OF BOCA RATON FIRE RESCUE SERVICES
COMMUNITY EMERGENCY RESPONSE TEAM PREPAREDNESS**

EXECUTIVE ANALYSIS OF FIRE SERVICE OPERATIONS
IN EMERGENCY MANAGEMENT

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ABSTRACT

Through the years, presidents have called upon Americans to assist their country by volunteering in various ways. A new wave of volunteerism occurred after the World Trade Center attacks of September 11, 2001. Americans were asked to volunteer for the betterment of their country through the Citizen Corps program. One of the core programs associated with Citizen Corps was the Community Emergency Response Team program, also known as CERT.

Boca Raton Fire Rescue Services (BRFRS) started offering the CERT program to its citizens after hurricane Andrew. Although BRFRS has trained over 250 residents in the CERT program, coordinators did not know if CERT participants were ready to respond after a disaster or work within the department's incident command structure.

This project employed an evaluative research method to answer the following questions:

1. Are CERT members prepared to respond after a disaster?
2. Are CERT members able to work within the Incident Command System?
3. What can Boca Raton Fire Rescue Services do to improve CERT preparedness?

The procedure used a literature review, a survey of 250 CERT members in Boca Raton regarding their comfort level as a CERT member, and their understanding of the Incident Command System (ICS). The research showed that the majority of respondents were comfortable with their roles following a disaster and the workings of ICS. The area of greatest need was educating team members on where their designated meeting spot was located for team deployment after a disaster.

Recommendations were made to provide additional training to all CERT members, and to continue reinforcing roles and responsibilities of CERT members after a disaster.

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INTRODUCTION

Many Presidents have asked Americans to step forward and become involved for the betterment of their country. President Abraham Lincoln told Americans that the United States government was, “of the people, by the people, for the people” (Gettysburg Address, 2004, ¶ 2). President John F. Kennedy introduced the Peace Corps in 1961 by asking Americans, “Ask not what your country can do for you. Ask what you can do for your country” (Wofford, 2003, p. 2). President Bill Clinton introduced AmeriCorps, and the Corporation for National Service by stating:

National service will be America at its best—building community, offering opportunity and rewarding responsibility. National service is a challenge for Americans from every background and walk of life, and it values something far more than money. National service is nothing less than the American way to change America. (Wofford, 2003, p. 1)

While Baby Boomers, individuals born between 1946 and 1964, are known for their work and volunteer ethics (Baby Boomers, 2004), the X generation, those born between 1966 and 1977 (Genxers, 2004), and Y generation, those born after 1978 (Genyers, 2004), have been known for asking “What’s in it for me?” The fire service is currently dealing with this very issue in retention of fire fighters and changes in work ethic. In a report highlighting political knowledge and participation of generations X and Y, Suzanne Soule (2001) points out that civic participation has declined among these generations. This may be due to the relative peace and well-being of the United States in the seventies, eighties and the quick victory over the Gulf War in the early nineties.

Civic participation started to change with the attacks on the World Trade Center on September 11, 2001.

In his first State of the Union Address following the World Trade Center attacks, President George W. Bush asked Americans to volunteer for the betterment of homeland security. President Bush stated:

My call tonight is for every American to commit at least two years, 4,000 hours over the rest of your lifetime, to the service of your neighbors and your nation. Many are already serving and I thank you. If you aren't sure how to help, I've got a good place to start. To sustain and extend the best that has emerged in America, I invite you to join the new USA Freedom Corps. The Freedom Corps will focus on three areas of need: responding in case of crisis at home, rebuilding our communities, and extending American compassion throughout the world. One purpose of the USA Freedom Corps will be homeland security. America needs retired doctors and nurses who can be mobilized in major emergencies ... volunteers to help police and fire departments, transportation and utility workers well-trained in spotting danger. (Bush, 2004, p.6)

Citizen Corps, part of USA Freedom Corps, incorporates many programs that offer volunteer opportunities to Americans to help their country as well as their community. One of those programs is the Community Emergency Response Team program, also known as CERT.

According to the Los Angeles CERT web page ("What is CERT", 2003), CERT was started by the City of Los Angeles Fire Department in 1986 after a Los Angeles City

investigation team went to Mexico City following an earthquake. This earthquake killed more than 10,000 people and injured more than 30,000. Mexico City had no training program for citizens prior to the disaster. However, large groups of volunteers organized themselves and performed light search and rescue operations. Volunteers were credited with more than 800 successful rescues, unfortunately, more than 100 of these untrained volunteers died during the 15-day rescue operation. The lessons learned in Mexico City, and brought back to the United States by the Los Angeles team, strongly indicated that a plan to train volunteers to help themselves and others, and become an adjunct to government response, was needed as an essential part of overall preparedness, survival, and recovery.

By 1993, the Federal Emergency Management Agency (FEMA) decided to make the CERT program available to communities nationwide. The Emergency Management Institute (EMI), a FEMA training academy, in cooperation with the LAFD, expanded the CERT materials to make them applicable to all hazards.

In 1998 Boca Raton Fire Rescue Services (BRFRS) started the CERT program and as of December 2003 had offered 20 classes. Boca Raton Fire Rescue Services Fire Chief Bruce Silk felt that education was the key to preparing citizens in the event another catastrophic storm hit south Florida. He wanted citizens to be prepared (Personal Communication, Bruce Silk, March 17, 1998).

In January 2002, CERT became part of the Citizen Corps, a unifying structure to link a variety of related volunteer activities to expand a community's

resources for crime prevention and emergency response. On the Citizen Corps web site, it asks Americans “Are you ready”? Boca Raton Fire Rescue Services has trained over 250 CERT participants since October 1998. The problem is CERT coordinators do not know if CERT participants are ready? Coordinators do not know if CERT members are confident in their roles and responsibilities as a CERT member dealing with a disaster, nor do they know if the CERT program and participants will easily be integrated into the department’s Incident Command structure. The primary purpose of this research is to determine if the CERT program is preparing Boca Raton citizens to be incorporated into BFRS response after a disaster. The secondary purpose is to seek suggestions as to how the department can better prepare CERT members.

This research used evaluative research to answer the following questions;

1. Are CERT members prepared to respond after a disaster?
2. Are CERT members able to work within the Incident Command System?
3. What can Boca Raton Fire Rescue Services do to improve CERT preparedness?

BACKGROUND AND SIGNIFICANCE

The City of Boca Raton is a municipality located in southeastern Palm Beach County, approximately forty miles north of Miami and midway between the cities of Fort Lauderdale and West Palm Beach. Boca Raton is a 28 square mile residential and business community of 80,000 people.

Boca Raton Fire Rescue Services Department comprises five 24 hour transport-capable paramedic rescue units, one 12 hour peak time paramedic rescue unit, and six advanced life support-capable fire apparatus. Boca Raton Fire Rescue Services is the

sole provider of emergency medical services for the community which started advanced life support paramedic services in 1974. Boca Raton Fire Rescue Services employs 169 state certified fire fighters, of which 143 are state certified paramedics and 26 are state certified Emergency Medical Technicians.

When BRFRS made the decision to offer the CERT program to the community, the decision was made to budget those monies needed to run four classes per year without reliance on grant money. One full time coordinator scheduled classes, students, instructors, prepared for each class, and also coordinated follow up activities and training. Once the program grew to over 200 participants, an additional full-time fire fighter was added to run the continuation portion of the program, and a part-time secretary was added to facilitate paperwork. BRFRS offers monthly continuing education classes, bi-annual meetings for all members, team leader coordinator meetings, and assists with individual team meetings.

While members are continually updated with education, training, and response guidelines, the system has never been tested during a real disaster, and there has never been a study to evaluate the participants comfort level in their roles and responsibilities after a disaster. Questions continue to arise at team meetings and semi-annual program meetings as to how they communicate after a storm, who they call, when do they go out to help, and where do they start?

In a letter to the City Manager from former Fire Chief Kerry Koen (personal communication, January 15, 1998) he stated, "The ultimate purpose of CERT training is to provide private citizens with the basic skills that they will need to handle virtually all of their own needs and then respond to their communities needs in the aftermath of a

disaster”. Each year BFRFS budgets \$25,000.00 to offer five classes per year, training over 100 people, without knowing the effectiveness of its efforts. Program administrators should be able to show that the monies budgeted for educational programs are monies well spent. While the CERT program is not a college program, residents expect their tax dollars to be accounted for. In an article covering what accreditors expect from college programs, Barbara Beno (2003) wrote, “All institutions should evaluate programs for their relevance, appropriateness, achievement of student learning outcomes, and future needs and plans for the organization” (p.1).

This research project is significant to Boca Raton Fire Rescue Services for several reasons. The research:

- Analyzes CERT participants’ preparation to respond after a disaster.
- Evaluates CERT members’ understanding of the Incident Command System.
- Determines what Boca Raton Fire Rescue Services can do to improve CERT preparedness.

In summary, the research obtained will assist Boca Raton Fire Rescue Services in evaluating participants’ knowledge acquisition, and application of program guidelines. By seeking input from participants, coordinators can evaluate changes needed to clarify participant responsibilities. The research should also prove interesting to other departments that are assessing the value of their CERT programs.

The Incident Command System (ICS) is identified as an “all-risk” system that can be applied to any type of emergency incident. It is also an “all-agency” system from the standpoint that the use of the system is not limited to fire departments alone. ICS is also used by other agencies to provide support to primary response agencies and allows

them to function within the system working toward a common goal of controlling the incident in a safe and cost-effective manner. The City of Boca Raton utilizes ICS as part of a state-wide effort that all agencies work within the same system. This research is relevant to *Executive Analysis of the Fire Service Operations in Emergency Management* because it identifies ICS as the system used to integrate CERT into the system after a disaster and evaluates team members' knowledge on its use (National Fire Academy [NFA], 1996).

This research is related to the United States Fire Administration's operational objective, "To promote within communities a comprehensive, multi-hazard risk-reduction plan led by the fire service organization" (NFA, 2002, II-2). By preparing citizens to help themselves, their families, and their neighbors after a disaster, Boca Raton Fire Rescue Services can better evaluate and prioritize response needs throughout the community.

LITERATURE REVIEW

Henning (1997) stated, "The challenge of managing volunteers today is to find a way to bring order out of chaos, and sense out of nonsense" (p. 60). Boca Raton Fire Rescue Services is no stranger to bringing order in times of chaos. When terrorists attacked American Media, Inc., by mailing anthrax to its building, Fire Rescue crews answered the call. Although they were navigating uncharted waters, Fire Rescue personnel assisted the Federal Bureau of Investigation with the investigation of the anthrax mailings. They took a situation that could have wreaked havoc and caused chaos, and turned it into a learning experience on disaster preparedness and mitigation. That event alone has increased BFRS resolve to not only make sure the organization

is prepared, but that Boca Raton's citizens are prepared to take a more active role ensuring their own safety.

Seidel (1997) stated, "When a disaster occurs, no single agency has the total resources to cope with the enormity of the problem" (p. 35). In his Applied Research Project submitted to the National Fire Academy, Fire Chief Richard Minor (1996) reported that within five minutes after the Whittier Narrows earthquake began, the Los Angeles Fire Department's emergency medical resources were depleted (pg. 17). Miami experienced a similar situation when the winds died down after hurricane Andrew. The Metro Dade, Florida 9-1-1 Communications Center had over 300 requests for assistance pending immediately following the hurricane (Grimes, 1999, p. 16.)

Panama City, Florida experienced similar problems after hurricane Opal passed through its area. Wells (1999) stated:

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 could have provided first aid, fire control, hazard identification, etc., and would have been helpful assistance prior to our arrival in this type of situation. (p 2)

Because of the history of volunteers helping after disasters, whether trained or untrained, it is necessary for governments and local communities to offer education and training that assists citizens from become secondary victims in their willingness to help

after a disaster. In the introduction of the CERT participant manual (2003, June) it stated:

Studies of behavior following disasters have shown that groups working together in the disaster period perform more effectively if there has been prior planning for disaster response. Effective response therefore requires comprehensive planning and coordination of all who will be involved—government, volunteer groups, private businesses, schools, and community organizations. With training and information, individuals and community groups can be organizations. With training and information, individuals and community groups can be needed in the immediate post-disaster period. The Community Emergency Response Team (CERT) program is designed to help communities prepare for effective disaster response through training and planning. (p. 2)

The CERT program can provide an effective first-response capability. The CERT student manual goes on to state, “Acting as individuals first, then later as members of teams, trained CERT volunteers can fan out within their assigned areas, extinguishing small fires, turning off natural gas inlets to damaged homes, performing light search and rescue, and rendering basic medical treatment” (pg. 3). It is imperative that this message goes out to people that live in communities prone to disasters.

In a special report (“Volunteers in Disaster,” 1991) examples of regular citizens helping at collapsed buildings and highway structures made them the real first responders. The report stated, “Recognition of the fact that regular citizens will be first on the scenes of damage in future earthquakes has led a number of municipalities in

the Bay Area to begin training programs to teach community volunteers basic search and rescue techniques, firefighting, and first aid” (p. 9).

The first documented incident of CERT members responding was in 1994 after the Northridge earthquake. In their article “The Real First Responders,” Borden and Lee reported that approximately 1,000 CERT members handled emergencies in their neighborhoods. Borden (2002) stated, “CERT members performed 203 searches, made 17 rescues, provided medical care to 57 injured victims, and transported 11 to hospitals, suppressed five fires, and controlled 156 utility problems” (p. 32). He also stated, “It’s apparent that this civilian response force performed many response activities that reduced life loss, injury, and property loss, before city emergency responders could arrive” (p. 32).

Since the introduction of CERT by the City of Los Angeles, hundreds of CERT training programs have emerged across the country. It has only been within the last few years that examples of their effectiveness have been documented after various disasters. During the 1998 Florida wildfires, Edgewater Fire-Rescue utilized their CERT members to answer phones in the Emergency Operations Center 24 hours a day, to provide directions and instructions to those that needed to evacuate, and to correct false reports regarding mandatory evacuation. Deputy Chief Joe Daly (1999-2000) stated:

The services and dedication provided by the CERTs was overwhelming.

Our CERT people are highly trained to participate in all types of disasters.

All we had to do was tell them what we needed and they took the ball and

ran with it. Their organizational ability and cooperation were outstanding.

(p. 2)

In June of 1999, Bellingham, Washington experienced a pipeline rupture and two local CERT teams self-activated to provide support to the Emergency Operations Center. Program coordinator Diane Middleton (1999-2000) wrote that not only did they answer phones, keep records of occurring events, and monitor radio traffic; they also utilized their disaster psychology to assist those around them by reducing the increased stress level (p. 1). Middleton also stated:

They saw disaster response in action. A familiar theme emerged from their comments; as so many in the community were saying how helpless they felt because they didn't know what to do, the CERT members felt empowered. They were prepared, they were educated, and they were part of the solution. Yes, we were all scared but we didn't feel helpless.

(p. 2)

While the first examples showed CERT participation in an Emergency Operation Center, Kansas actually used their CERT members to assist with the physical work of helping at an emergency site. On May 4, 2003, Johnson County, Kansas experienced numerous tornadoes, killing one and causing massive destruction and debris. The Olathe Fire Department called on its CERT members to assist with search and rescue and debris removal for its neighboring towns. Members were first emailed with a cell phone number for additional information, and then reported to two muster points for transportation to the

affected sites (Personal Communication, Rita Hoffman, November 20, 2003).

Emergency Management Coordinator, Rita Hoffman (2003) further stated:

CERT training is not just for responding at the time a disaster is happening. Many CERT training topics were teaching points during this recovery effort, including team organization, disaster psychology, and medical support. Our CERT trained citizens are very valuable assets to our communities. We are very proud of each and every one. (p. 2)

The most recent example of CERT activation was for assistance in evacuation from the Simi Valley fire area in California. On October 27, 2003, Captain Don Lee called on CERT members to direct traffic in and out of Mason Park, transport water and supplies to one of the shelters, and keep residents up to date on information regarding the fires ("CERT Battalion Call-Out", 2003, p. 2-3).

These are all examples of how CERT members can be utilized in times of disaster. In particular, these examples show how citizens can take a more active role in assisting during large scale emergencies thus augmenting the emergency response community.

Grimes (1999) stated, "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" (pg. 3).

Managing CERT resources is a major challenge for any department. The best way to make sure teams function in a safe and effective manner is to have them follow

the ICS structure just like the rest of the fire service. In the CERT student manual (2003, June), participants are informed that:

The Incident Command System (ICS) is the system used by fire and law enforcement agencies to manage emergency operations. When CERTs activate for their neighborhood or workplace they become part of that system. CERTs interrelate with ICS. CERTs are part of ICS. All CERTs, through their Incident Commanders, report to the first fire or law enforcement official at their location and take directions from that person until told that the command system has changed, or until relieved. (p. 6-3)

While the ICS was originally developed for wildland fires, it became apparent very quickly that the system could be applied easily to day-to-day fire and rescue operations. The job of managing thousands of emergency response and management personnel can be overwhelming. The ICS structure is flexible enough that it can be used for a single house fire or a multi-jurisdictional disaster of any kind. When looking at the meaning of the word FIRESCOPE and what its primary function is, explains why it fits so easily into everyday situations and major disaster. In the EAFSOEM student manual (2001, March) students are told that FIRESCOPE derives its name from "Fire Resources of California Organized for Potential Emergencies". FIRESCOPE is primarily a command and control system which breaks down job responsibilities and organizational structures. The student manual goes on to state:

Standardization through a systems approach to managing emergencies is the key to success. By following set procedures and reasonable guidelines, the odds of a positive conclusion at emergency incidents is

increased. ICS also is an “all-agency” system from the standpoint that the use of the system is not limited to fire departments alone. Other emergency response agencies, such as law enforcement and EMS, are using the system to manage incidents for which they have primary responsibility. Agencies that provide support to primary response agencies also are able to function within the system working toward a common goal of controlling the incident in a safe and cost-effective manner. (3-6)

So how can CERTs be integrated into a fire department’s ICS structure? Frank Lucier (2000), who works for the North American Emergency Management agency and is editor of *The Connection*, a newsletter about community preparedness wrote:

One answer is to institutionalizing ICS within the CERT program from the very start. Introduce the class to the basic principles of the ICS system as a “labor-separation” tool. Management is “in charge”, Operations are the “doers”, Logistics are the “getters”, Planning and Intelligence are the “thinkers”, and Administration are the “recorders”. That’s all the information that they need to start using ICS. The more they use the tool the more they are comfortable with it and the more effective they will be when they have to use it. (p 2)

The CERT student manual devotes an entire chapter to CERT organization and the ICS. While this is a good beginning, those of us in the fire service know that practice on every call is necessary to maintain ease of use and a solid understanding of the objectives. Lucier (2000) feels training on the ICS should be an ongoing process. He stated:

Everything that they do in the class, or as a team after the training is complete, should use the ICS. Community CERT drills and exercises should incorporate ICS in the scenarios so that the teams have an opportunity to practice emergency roles in a simulated disaster. The teams can also practice this on their own doing tabletop disaster exercises. The goal is to get people to feel comfortable with the various functions of ICS and the responsibilities of each function so when the disaster hits they can smoothly transition from their normal CERT activities to disaster roles and responsibilities. (p. 3)

He even has an interesting way of teaching the ICS and having students use it during the course. Lucier (2000) wrote:

In the first class give a simple explanation of ICS and conduct a small exercise to start to get people to understand the concept of ICS. Divide the class up into groups and designate an ICS function for each of the groups (Management, Operations, Logistics, Planning/Intelligence and Administration). Give the Management Section a project for the next class, start out with something simple like getting cookies for the following session and work them through the process using ICS. Management sets the priorities... we need cookies for the next class. Planning and Intelligence decides how many and maybe does some research on what kind of cookies people like. Logistics collects some money from the class and purchases the cookies. Operations distributes the cookies. Administration keeps a record of what was collected and what was

purchased. Planning and Intelligence keeps records of which cookies were best received. Using ICS in this manner will get people comfortable with the concepts of the system. (p 2)

While this process may seem overly simplified, experience shows that when teaching new concepts that are very detailed, breaking them down into small tasks makes it easier for the student to comprehend and retain. In the CERT student manual (2002) a review of ICS and how it should be utilized is covered. Each CERT must establish a command structure. A CERT Team Leader, also known as the Incident Commander, is appointed to direct team activities. For CERT volunteer activities and training, this person may be appointed. However, during activation for a disaster, this person is the first to arrive at a pre-designated staging area much like the first arriving engine company at a fire.

While a good concept in theory, participants need very specific guidelines on how the ICS should be used. The CERT student manual attempts to break down ICS from the very beginning of an incident. The manual explains:

CERT organization proceeds in the following way after an incident: Following the incident, CERT members take care of themselves, their families, their homes, and their neighbors. If the SOP calls for self-activation, CERT members proceed to the pre-designated staging area with their disaster supplies. Along the way, they make damage assessments that would be helpful for the CERT IC's decision making. (p. 6-6)

Once team members arrive at their designated meeting spot, that is when the ICS

structure begins. Students are taught:

The first CERT member at the staging area becomes the initial IC for the response. As other CERT members arrive, the CERT IC may pass leadership to someone more qualified. Otherwise, the CERT IC develops the organization to ensure effective communication, to maintain span of control, maintain accountability, and do the greatest good for the greatest number without placing CERT members in harm's way. As intelligence is collected and assessed (from CERT members reporting to the staging area, emergency volunteers, and reports from working teams [e.g., search and rescue] by the planning function, the IC must prioritize actions and work with the Section Chiefs or leaders). The CERT organization is flexible and evolves based on new information. (CERT Student Manual, 2003, p. 6-6)

The Community Emergency Response Team of Los Angeles has a section of their web page devoted to working within the ICS. Jupiter Farms, Florida CERT standard operating guidelines have a section on command and control. They use ICS to clarify response, communications, and team organization. Boca Raton Fire Rescue Services teaches participants ICS and how each division functions. Areas of the City are broken into zones, with each zone having a team leader. Team leaders decide on the designated meeting spot and update all team members on roles and responsibilities depending on their expertise.

Although all drills and class components are taught using the ICS, instructors need to make sure participants will be comfortable using the ICS while on their own.

Lucier (2000) stated:

In order for them to be effective following a disaster they must be autonomous, being able to take action on their own without direction, and they need a structure in which to operate. That structure could be the ICS system, but we are taking people from all walks of life and when a disaster hits we expect them to take on roles that are unfamiliar and definitely not transitional from their daily routines. (p 2)

Because it is a new and unfamiliar tool, it is imperative that instructors consistently use ICS frequently throughout the nine-week program. The fire service also realizes that continuing education on many topics are necessary to maintain proficiency. Borden (2002) remarked:

Experience makes it obvious that a community trained to respond to protect their families, neighbors and co-workers will reduce life loss and injury at any kind of emergency or disaster, human-caused or natural. Knowing what to do and how to do it before the event is critical to survival. The most abundant response resource in a disaster is the people in the neighborhoods. (p. 33)

Borden goes on to state:

One of the many conclusions drawn from the terrorist attacks on 9-11-01 was that the community must be prepared to be self-sufficient and to be the first responders. Many thousands of workers in the World Trade Center who were trained to evacuate were saved because they acted on their own, as they'd been trained. (p. 33)

Borden's final remark about those less fortunate on September 11, 2001 sets the stage for what Americans are capable of when put in unforeseen and difficult circumstances. He stated, "The motto "Let's roll" from the heroes aboard Flight 93 signifies ordinary people's willingness to respond in extraordinary circumstances to save others, and points to the need for self-sufficiency and readiness to respond" (p. 33).

Summary

The literature review established that Americans have volunteered for the betterment of the country for years. Events over the last two decades have highlighted the need for a specific type of volunteer. The fire service has been tasked with increasing demands and in the event of a disaster will quickly become overwhelmed. Citizens must learn to take care of themselves and also to assist emergency responders or do without emergency response. ICS continues to be the format for coordinating emergency management and emergency response. Communities should either start or continue to offer education to their citizens to assist them in the aftermath of a disaster.

PROCEDURES

The initial research was performed at the U.S. Fire Administration's Learning Resource Center. The literature review included periodicals, books, trade journals, local and national newspapers, internet journals, and four personal interviews. A local city library was utilized to further the research. The author's personal library was also reviewed for corresponding information. A survey was conducted to answer the research questions. The survey is detailed as follows.

CERT Program Participants Survey

An attempt was made to survey all 250 participants of BRFRS CERT program listed as active members on our current data base. A questionnaire was developed from

scratch to ascertain CERT participants' knowledge regarding their role after a disaster and the use of ICS. The questionnaire was pilot tested on the staffs of the training division who have knowledge of the CERT program. No changes were necessary after the pilot test. A copy of the survey questionnaire is located in Appendix A. In total, 250 surveys were mailed on November 15, 2003. Each survey included a self addressed stamped envelope for the return of the survey. Participants were also given the option of returning the results via fax.

Respondents had until December 10, 2003 to return the surveys. Of the 250 surveys initially sent, 185 were completed and returned by the appropriate deadline. A total of 74% of surveys were received. Additionally, 19 surveys were returned by the Post Office as undeliverable. The goal of the survey was to answer the research questions and inquire about what BFRS can do to better assist participants in being prepared to respond after a disaster. Respondents were initially asked if they were an active member of the CERT program or if they would like to be considered inactive. If a respondent answered they were active they were asked to answer the following questions.

Question #1 asked the participant if they were clear as to what their role would be after a disaster. Respondents could simply answer yes or no. Survey question #1 was asked to answer research question #1.

Question #2 asked the participant if they felt comfortable performing the role expected of CERT. Respondents could simply answer yes or no. Survey question #1 was asked to answer research question #1.

Question #3 asked the participant if they knew who their team leader was. Respondents could simply answer yes or no. Survey question #3 was asked to answer research question #1.

Question #4 asked the participant if they know how to contact their team leader. Respondents could simply answer yes or no. Survey question #4 was asked to answer research question #1 and research question #2.

Question #5 asked the participant if they knew where their designated meeting spot was. Respondents could simply answer yes or no. Survey question #5 was asked to answer research question #1 and research question #2.

Question #6 asked the participant if they have used their CERT training to perform any rescue activities. Participants could answer yes or no. If they answered yes they were asked to explain what they did. Survey question #6 was asked to answer research question #1.

Question #7 asked the participant if they were comfortable working within the Incident Command System structure. Respondents could simply answer yes or no. Survey question #7 was asked to answer research question #2.

Question #8 asked the participant if they attend continuing education classes. Respondents could simply answer yes or no. If respondents answered yes, they were asked how many they attended last year. If respondents answered no, they were asked why they did not attend. Survey question #8 was asked to answer research question #3.

Question #9 asked participants what can be done to better assist them in being prepared to respond after a disaster. Respondents were given space to write in their suggestions. Survey question #9 was asked to answer research question #3.

The final survey question, #10 asked participants if they no longer wished to participate, and to give reason(s) why. Survey question #10 was asked to answer research question #3.

Assumptions

An assumption was made that all respondents to the questionnaires had an understanding of the questions and were honest with their answers.

Limitations

Several limitations were experienced in researching this applied research project. The first limitation was the initial response for the CERT questionnaire. Although a self-addressed stamped envelope was included with each questionnaire, 74% of the surveys were returned. A second limitation was the lack of published information regarding the actual use of CERT teams and how they function. There is an abundance of information on starting a program, but there is little documentation on when CERTs were used or how effective they were. On those articles found about CERT activation it does not include detailed information on either the ICS or how their roles were assigned.

RESULTS

The results of the literature review and the surveys provided the following answers.

1. Are CERT members prepared to respond after a disaster?

Of the 132 participants that stated they were active, the majority of the 114 responses

(87%) indicated they were clear as to what their role would be after a disaster. There were 120 (91%) of respondents that indicated they feel comfortable performing the role expected of CERT. Of those surveys returned, 113 (86%) know who their team leader is. It was found that 110 (84%) know how to contact their team leader. The worst area for preparation is the designated meeting spot. Only 58 (44%) knew where their designated meeting spot was located. A very small number 15 (12%) of participants have actually used their training in an emergency situation.

2. Are CERT members able to work within the Incident Command System?

Surprisingly, 113 (86%) of the respondents indicated they were comfortable working within the incident command system structure.

3. What can Boca Raton Fire Rescue Services do to improve CERT preparedness?

Eighty participants (62%) attend continuing education classes that were offered twice a month. While BRFRS initial assumption was that it is the same core group of people that attend the classes, the research disclosed otherwise. Most respondents indicated that their schedules could not handle additional activities or classes as the reason they did not attend. The average number of classes attended by those that made the effort were two per year. Most respondents did not offer any suggestions for improving the CERT program; they used the space provided to give praise for the effort put forth by the Boca Raton Fire Rescue Services Department.

There were 50 (14%) surveys returned from people stating they no longer wanted to be active in CERT. Three individuals stated it was due to their relocating, one stated he

was too old, three stated it was due to illness, and 43 (12%) gave no reason as to their not wanting to participate.

DISCUSSION

- 1. Are CERT members prepared to respond after a disaster?** The results indicate that Boca Raton's CERT members feel they are ready when disaster strikes. The majority of individuals who started out going through the nine-week training feel the program is worthwhile enough to continue participating in. The results show coordinators and instructors that we are preparing individuals to work as teams. Members know what is expected of them should they have to respond, and where they need to go at the proper time. Some individuals have used their training to mitigate emergencies either at work or in their personal lives.
- 2. Are CERT members able to work within the Incident Command System?** The results show coordinators and instructors that members are comfortable working within the Incident Command System and will be able to coordinate their neighborhood teams as well as report appropriately to Fire Rescue personnel when approached.
- 3. What can Boca Raton Fire Rescue Services do to improve CERT preparedness?** Coordinators were pleased to see that a large percentage of members are taking advantage of the continuing education classes offered on a twice monthly basis. The fire service has a saying, "If you don't use it, you lose it". This is used when referring to skills not used on a regular basis. In the CERT student manual it stated:

Training in disaster response should not be a one-time event. Awareness, commitment, and skills must be reinforced through follow-up training and repeated practice to maintain the edge necessary for effective response in the face of a disaster. To maintain your skill level and continually improve performance, you and your team members should participate in continuing supplemental training when offered in your area. (p. 6)

CERTs need to continue their initial training and practice their skills just as professional rescuers find it necessary to do the same.

For years program administrators have heard the same questions over and over again. What do I do if there is a storm? How do I contact my team leader? Do I set out on my own? The survey results show that continuing education classes on the core concepts of a Community Emergency Response Team, are paying off. Thousands of dollars and hundreds of hours are spent training CERTs to either help themselves or respond after a disaster.

Trevor Miller, a fire fighter and CERT instructor for Overland Park Kansas, remarked at how well CERT training actually worked when put to the test after an F4 tornado ripped through town. Miller directed dazed residents to get tools, clear roads, and search homes for any potential victims. Miller stated:

While I have been a supporter of our CERT program in Overland Park from the beginning, both as an instructor and as a firefighter, this experience showed me first hand how valuable those CERT members would be if we were ever unfortunate enough to experience a disaster of this magnitude in Overland Park. It also showed me first hand what I

knew in theory, the program works. Average people can do a lot to help themselves and their neighbors in a disaster, long before the fire department arrives. As an emergency responder, I'm glad we have those folks out there waiting to help if we need them. (2003, p. 2)

In his article in 9-1-1 magazine, Geoff Cady (2000) reports that communicating with CERTs and passing their valuable information along to the IC is of utmost importance. This will allow emergency services to prioritize requests for resources as they become available. Getting this valuable information is dependent upon the response capability and readiness of disaster victims who have been transformed into first responders. Cady stated, "I have found very few agencies willing to dedicate the number of resources needed to adequately train citizens to respond on their own behalf" (p. 90).

Cady further stated:

The unfortunate truth is staff positions dedicated to public education are not seen as essential for the protection of life and property, but more often are seen as administrative fat by public policy makers. However, there are some communities and their elected officials who have made the commitment to invest in public education and planning efforts. (p. 90)

Boca Raton is one of those communities. From the very beginning the Fire Chief, City Manager and City Council have been supportive of the CERT program. One of the council members has even gone through the entire program and assists at various events. The research shows that the effort and monies put forth to offer a CERT program to the citizens of Boca Raton is money well spent. Wilson (1983) stated:

Evaluation is the yardstick or thermometer we apply to a program. It determines if what is done is what was intended. It has many names: feedback, assessment, controls. It is as essential to the health of any program, including one involving volunteers, as planning". (p. 88-89)

There are many reasons why individuals chose to volunteer. For some, it is a way to return to the community some benefit received. To others, it is a way to feel in control of one's destiny. When citizens volunteer for a governmental agency, they develop a sense of ownership, a commitment to community improvement. If they are fortunate, some of them may even get the opportunity to help someone. Perhaps then, they will experience the pride that professional rescuers feel when assisting those in time of need.

The Citizen Corps manual sums up volunteering for the betterment of the country. It stated:

Securing our safety and freedom requires that we all work together. Every American has an initial role to play. Major disasters in a community can overload the capability of first responders, especially during the first critical 12 to 72 hours of the event. CERT will provide the community with a well trained, readily available pool of trained people who can help during this critical time when outside assistance may have not yet arrive. (p. 9)

Boca Raton is confident that this will be the case should a disaster strike our community.

In Summary, Boca Raton CERT participants find the training has prepared them to respond after a disaster, while working within the ICS structure. CERT members also

recognize the importance of continuing education and the need to review material previously learned. Several departments have seen the value that a CERT program can provide after an incident, and feel the effort and money spent was a worthwhile investment. While not all organizations realize the importance of public education, the City of Boca Raton, through its leaders, recognizes the CERT program as an opportunity to provide an increased preparedness level for its citizens.

RECOMMENDATIONS

Based on the results, the author offers these recommendations on preparing CERT members to work within Boca Raton Fire Rescue Services system after a disaster.

1. Continue to offer training and guidelines on the roles and responsibilities of CERT members after a disaster.

Team members will continue to maintain the knowledge of their roles and responsibilities through continuing education and reinforcement. At annual meetings review their roles and responsibilities step by step in both a standard activation, or self activation. Continue to stress the importance of command and control and appropriate communications. Review forms needed for appropriate documentation. Provide drills that require team members to utilize each step as they would in a real situation. Reinforcement is essential for maintaining skills and knowledge.

2. Utilize the Incident Command System at all meetings and training opportunities.

Retention and understanding will develop with continual use of, what for

CERTs is a new process. Offer continuing education classes through the on-line ICS course offered through the National Fire Academy. Offer incentives for CERT members to complete the program.

3. Request suggestions from team members and instructors on improvements needed to maintain preparedness.

Team members and instructors see how and why certain types of training work. Their input is valuable in maintaining a quality program. Team members need to educate instructors on what areas they need additional assistance with.

4. Develop a training program to teach fire fighters the roles, responsibilities, and abilities of Community Emergency Response Teams after a disaster.

Once fire fighters have a thorough understanding of how CERTs operate, and what guidelines they are given to follow after a disaster, the ability of both entities to work together will be enhanced.

5. Continue to research the effectiveness of the CERT training program.

Continued evaluation will ensure that the program is on target with the needs of CERT participants.

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Appendix A

**MAIL TO: LT. CINDY METCALF
2333 W. GLADES RD.
BOCA RATON, FL. 33431**

A Study of CERT Readiness Survey Questionnaire

Please select one.

I am an active member of C.E.R.T. and will assist in an emergency – continue with survey

I no longer participate in Boca Raton C.E.R.T. - **Please answer number 10 only**

1. Are you clear as to what your role will be after a disaster? YES___ NO___

2. Do you feel comfortable performing the role expected of CERT? YES___ NO___

3. Do you know who your team leader is? YES___ NO___

4. Do you know how to contact your team leader? YES___ NO___

5. Do you know where your designated meeting spot is? YES___ NO___

6. Have you used your CERT training to perform any rescue activities?
If yes, please explain _____

7. Are you comfortable working within the Incident Command
System structure? YES___ NO___

8. Do you attend continuing education classes? YES___ NO___

How many continuing education classes did you attend last year? _____

If none, why not? _____

9. What can we do to better assist you in being prepared to respond after a
disaster? _____

10. If you **no longer participate**, please give reason(s) why. _____

<p>PLEASE RETURN BY DECEMBER 10, 2003 TO: LIEUTENANT CINDY METCALF BOCA RATON FIRE RESCUE SERVICES 2333 W. GLADES RD., BOCA RATON, FL. 33431</p>
