

**COMMUNITY PREPAREDNESS AND DISASTER RESPONSE
THE CITY OF LOS ANGELES
COMMUNITY EMERGENCY RESPONSE TEAM PROGRAM**

By

**Frank W. Borden
Commander
Disaster Preparedness Division
Los Angeles City Fire Department**

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Community Preparedness

The damage caused by catastrophic earthquakes affects all elements of society and all segments of government. Survival, self-help, and mutual aid are all terms used to describe essential measures for individuals and neighborhoods to cope in the aftermath of a catastrophic event. Preevent planning is based on the assumption that such a catastrophic event will severely restrict and overwhelm our response resources, communications, transportation, electricity, and lifeline systems. This will leave many individuals and neighborhoods cut off from outside support, as well as restrict the access of emergency response organizations into critically affected areas. Households and neighborhoods may need to rely on their own resources for food, water, first aid, and shelter in the 72 hours immediately following the earthquake. The ability of individuals and neighborhoods to fend for themselves during this crucial time period will be critical to their survival and recovery.

Community-based preparedness planning presents a viable means for responding to the anticipated disruptions and potential hazards which will arise as a result of a catastrophic earthquake. Household and neighborhood hazard reduction and preparedness measures are cost-effective methods of reducing injuries, loss of lives, and property damage. Various studies of behavior following disasters document the emergence of effective groups of both friends and strangers to deal with immediate survival and relief problems. Further studies indicate that individuals and organizations perform more effectively in the disaster period if there has been prior planning for disaster response. Preevent neighborhood self-help preparedness will enhance the ability of individuals and neighborhoods to manage, as well as reduce some of their own emergency period needs. Findings on the effectiveness of organized grassroots efforts to enhance preparedness indicate that such efforts are probably more successful if they are incorporated into the social and political fabric of the community -- in the neighborhood, schools, work places, churches, etc.

While existing disaster contingency plans are designed to coordinate the activities of governmental and quasi-governmental groups, the effects of a catastrophic earthquake will impact all elements of our society. Effective response will therefore require comprehensive planning and coordination of all

who need to be involved -- government, volunteer groups, private businesses, schools, etc. With the necessary training and information, individuals and neighborhoods may serve as a crucial resource, capable of performing many of the necessary emergency functions in the immediate post-disaster period.

Program Development

The idea for our program to train volunteers from the community to assist emergency services personnel during large natural disaster began in 1985. In February of that year, a group of Los Angeles City officials went to Japan to study its extensive earthquake preparedness plans. As a member of that group, I found an extremely homogeneous society that had taken extensive steps to train entire neighborhoods in one aspect of alleviating the potential devastation that would follow a major earthquake. These single-function neighborhood teams were trained in either fire suppression, light search and rescue operations, first aid, or evacuation.

In September of that year, I lead a City investigation team to Mexico City following an earthquake there that registered 8.1 on the Richter scale and killed more than 10,000 people and injured more than 30,000. Mexico 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 are credited with more than 800 successful rescues; unfortunately, more than 100 of these untrained volunteers died during the 15-day rescue operation.

After returning from Mexico City, we were convinced 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 our overall preparedness plan and part of the solution to survival and recovery. Councilman Hal Bernson of the 12th District asked the Los Angeles City Fire Department (LAFD) to develop a pilot program to train a group of leaders in his neighborhood watch organization in various disaster operations. We developed a concept involving multifunctional volunteer response teams with the ability to perform basic fire suppression, light search and rescue, and first aid. This first team of 30 people completed training in early 1986 and proved that the concept was viable through various drills, demonstrations, and exercises, but expansion of the program throughout the City was not feasible, due to limited City resources to conduct the training until an event occurred in 1987 that impacted the entire City.

On October 1, 1987, the Whittier Narrows earthquake vividly underscored the threat of a community-wide major disaster, and demonstrated the need to expedite the training of civilians to prepare for earthquakes and other emergencies.

Following the Whittier Narrows earthquake, Mayor Tom Bradley, Councilman Bernson, the City Council, and Chief Engineer Donald O. Manning took an aggressive role in protecting the citizens of Los Angeles by creating the Disaster Preparedness Division (DPD) within LAFD.

In November 1987, DPD was formed with the stated objective to develop, implement, and maintain a comprehensive City disaster preparedness program. The purpose of the program is to prepare the citizens of Los Angeles to cope with the effects of a major disaster. The duties of the Division are to:

1. Educate and train the public and government sectors in disaster preparedness;
2. Research, evaluate, and disseminate disaster information; and
3. Develop, train, and maintain a network of Community Emergency Response Teams (CERTs).

To accomplish the last responsibility, the Community Response Team Unit (CRTU) was created within DPD to train volunteer CERTs in numerous City departments and City Council districts, including private businesses and community organizations.

In every major disaster, volunteers emerge to do the initial search, rescue, and first aid. Since such volunteerism inevitably takes place, it makes good sense to maximize the results of these efforts through formal training. During a major disaster, City emergency services will likely be overwhelmed, and it is intended that these trained teams will act as an adjunct to City emergency services. Once trained, individuals are capable of acting either as a member of a team, or as a leader, capable of directing untrained volunteers during an emergency.

The Program

Volunteers are trained in basic self-help emergency functions, such as team organization, management, fire suppression, utility control, light search and rescue, and disaster medical operations. Class size varies, depending on need; however, in order to maximize training efforts and insure quality of instruction, classes should be between 25 to 60 persons. The course is taught by Firefighters and Paramedics in seven 2-1/2 hour classes with major emphasis on "hands-on" training.

Teams are trained from among the following group classifications:

1. Community Groups

Homeowners associations, neighborhood watch groups, or religious organizations are brought together to form geographically distributed teams within each of the 15 Council Districts.

2. Business and Industry

Business groups are selected on the basis of the location where they can accomplish the most good for the public during a large disaster. This includes high-rise office buildings, large hotels, or large industrial complexes.

3. City Government

In order to improve disaster operations and City's recovery abilities, an emphasis has been placed on training City employees in emergency response so as to enable City government to continue to provide needed services to its citizens.

Teams are developed using a variety of methods. Close interaction with the individual City Council offices allows the Fire Department to identify preexisting community groups with strong leadership and an active membership. Members of the business community are becoming increasingly aware of the dividends that disaster preparedness pays in surviving a disaster and minimizing losses. They are seeking disaster preparedness training in greater numbers than ever before.

A 7 week, 17-1/2 hour, training program was developed to begin preparing individuals for the overall demands resulting from a major disaster. The topics covered in the course include the following:

Class 1 begins with an overview of the earthquake threat in Southern California. Personal and family preparedness are given a special emphasis because individuals must feel comfortable about the safety of their family and loved ones if they are forced to function away from home during an emergency. This is followed by "how to" information on nonstructural hazard mitigation.

Class 2 outlines basic fire suppression techniques to include fire chemistry, fire extinguisher types and usage, and utility control. During Class 2, participants will extinguish a flammable liquid fire and begin developing self-confidence and teamwork.

Class 3 begins with disaster medical operations to include recognition and treatment of life threatening emergencies. Volunteers also learn the principles of triage, transportation, and treatment area management.

Class 4 is the second session of disaster medical operations. In this class, the head-to-toe patient evaluation is taught, along with recognition and treatment of nonlife threatening injuries.

Class 5 discusses light search and rescue operations, including search techniques, evacuation and rescue methods, principles of mechanical advantage, and basic cribbing techniques. Heavy emphasis is placed on recognizing rescue limitations and safety by discussing the dangers of various building construction.

Class 6 prepares members for the emotional environment they will be confronted with by discussing the psychology of a disaster. The Incident Command System is introduced in a simplified format, again stressing the need for teamwork, organization, and logistical planning.

Class 7 is a course review and simulated disaster exercise. Participants are required to apply the individual principles they have learned to the overall demands of a simulated disaster. This class will dramatize the multifunctional training approach, as well as promote team reliance.

Upon completion of the course, team members are given a certificate and provided with green hard hats and silkscreened vests for identification. Community teams are encouraged to purchase personal safety equipment, such as goggles, gloves, and basic first aid supplies, while this equipment is purchased for our City employee teams. Businesses, on the other hand, are encouraged to provide needed safety equipment for their trained employees, as well as establishing an emergency supply cache.

Attempts are made to custom fit each program to the needs of the group receiving the training. For example, when teaching the program to a community group in the heavily brush laden Santa Monica mountains, a special emphasis is placed on home preparation for brush fires and actions to take during a large scale brush fire. When working with business teams within a high-rise building, alarm and standpipe systems, stairwell access, and evacuation techniques are discussed.

Obviously, training can not be a one-time job. Awareness, commitment, and skills must be repeatedly practiced to maintain the edge necessary for the greatest level of response. With this in mind, "The Community Liaison Program" was formed. In this program, each member of LAFD's CRTU is assigned to at least one geographical Council District to act as a liaison between DPD and the

trained teams within that district. These members are in a position to stimulate interest and maintain involvement in the team by scheduling and attending regular team meetings, and by planning and participating in practice disaster scenarios.

In order to maintain skill levels and improve performance, supplemental training for each team is conducted in quarterly 2-1/2 hour continuing education classes. Teams from various areas are combined during this training so that valuable LAFD resources can be more efficiently utilized, and the networking of teams can be expanded.

Team Operations

As each team is formed, they select a team leader, one alternate, and an emergency meeting location (staging area). Teams are instructed to go into action during a relatively moderate earthquake of 5.0 magnitude or greater on the Richter scale. The idea is to have the team practice mobilization and damage assessment skills, regardless of actual need.

The deployment of CERTs in an actual disaster is intended to occur progressively and as needs dictate. Members are taught to first assess themselves and their immediate environment. If there are no problems, then they expand to adjacent areas and continue to assess damage and provide assistance through their skills in emergency operations.

Since damage from earthquakes is known to vary considerably from one location to another, the CERT members, if no problems are found, would report to their staging locations and formulate action plans based on overall area needs. If members find themselves in a heavily affected location and problems are greater than they can handle, then "runners" are sent to staging locations to obtain help from available resources. Ham radio and CB radio links may be used to increase communication capabilities and coordination.

The staging location is where LAFD would interact with CERTs. Overall damage assessment and volunteer resource availability can thus be more effectively communicated and utilized.

The CERT program can be an effective first-response capability. Acting as individuals first, then later as a team, trained volunteers can fan out within their particular areas, extinguishing small fires, turning off natural gas inlets to damaged homes, performing light search and rescue, and then rendering basic first aid. Trained volunteers also offer an important potential work force to service organizations in nonhazardous functions, such as shelter support, crowd control, evacuation, etc. (See Figure 1)

Conclusion

Recent experience with earthquakes in California has proven that dedicated emergency resources will be depleted to the extent that some individuals or neighborhoods will need to rely on themselves during the first 24 to 72 hours or more after such an event.

Clearly, the key to survival is self-sufficiency, and the key to mitigating the effects of a disaster is preparation and planning. In that regard, the CERT program is a significant step toward reducing the impact of a disaster by making all City employees and other civilian groups capable of acting in the capacity of disaster response personnel. The training is not designed to enable civilians to respond to a disaster with the ability of professional emergency personnel. Rather, it is meant to teach greater self-sufficiency and optimize chances of survival. Participation in a training program such as this will benefit everyone concerned, and go far in saving lives and preventing property damage.

As of April 1991, 221 teams (over 7,000 people) have been trained by members of DPD. This total number of teams is broken down as follows: 90 community teams; 84 business teams; and 47 City employee teams. More teams are scheduled for training throughout the coming year. In fact, there is a six-month waiting list for this program.

The ability of a business or community to effectively recover from the devastating effects of an earthquake requires the active participation, planning, and cooperation of all levels of the population. The fundamental responsibility for preparedness, however, lies with every individual. By encouraging preparedness efforts and hazard identification and mitigation, the effects of a disaster can be minimized considerably, as well as facilitate recovery.

The benefits of this program are numerous. It has increased our overall level of disaster readiness, provided emergency skills that people may use in day-to-day emergencies, enhanced the bond between government and community, increased community spirit, and improved the quality of life for the people of our City.

The Future

Our long-term goal is the establishment of 150 viable CERTs, and an unlimited number of business teams, throughout the City by the middle of 1992.

Because of the enormous success of this program and the national and international demand for information, we are pleased to have the opportunity to transfer this technology to other agencies and governments. LAFD, in cooperation with the Federal Emergency Management Agency (FEMA), will

begin a "train the trainer" course for California in April 1991. This will initiate a program that will allow others to benefit from our experience.

The presentation of this "train the trainer" course will continue in the central United States in the Summer of 1991 and be made available at other, to be determined, locations through 1992. The presentation of this program will represent a commitment from LAFD and FEMA, and to make instructor training available throughout the country. This "train the trainer" program will represent a portion of the City's contribution to the International Decade for Natural Hazard Reduction.

Our City is experiencing the emergence of a new emergency response force. We are building a team of government and community resources that will be a formidable countermeasure against the destruction caused by the earthquake we are expecting.



RESPONSE TEAM ORGANIZATION

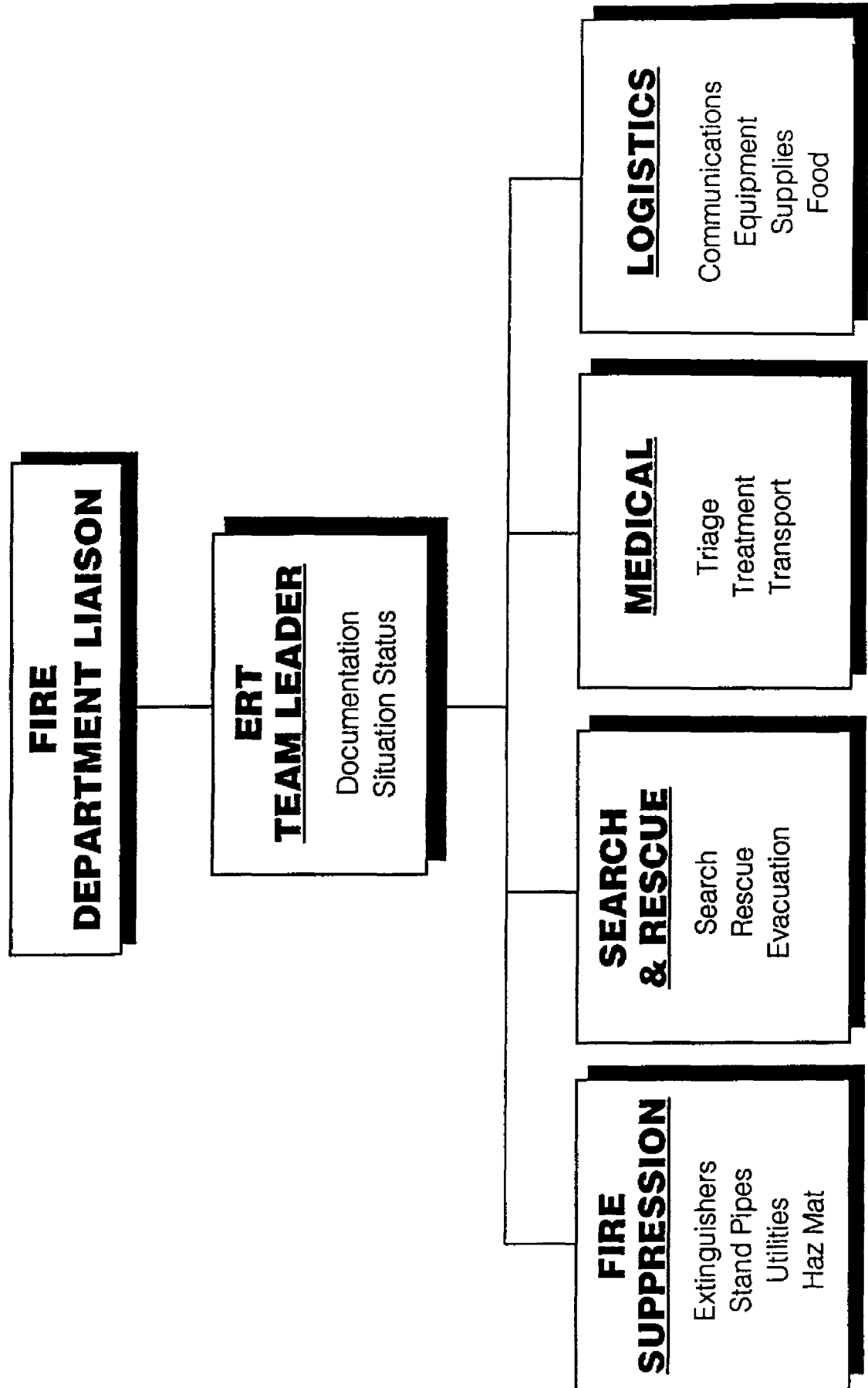


Figure 1