



Northridge Earthquake, January 17, 1994

On January 17, 1994, a magnitude 6.8 earthquake occurred at 0431 hours in Los Angeles. The earthquake's epicenter was in Northridge according to the Caltech Seismological Laboratory. Although the surface wave magnitude of this earthquake was initially estimated to be 6.6, it was later upgraded to 6.8 by the National Earthquake Information Center.

The following is a listing of significant events relative to this earthquake as well as actions taken by the Los Angeles City Fire Department to mitigate its impact upon residents of the City of Los Angeles. Where possible, events are listed in chronological order.

Immediately following the earthquake, the L.A.F.D. initiated the Earthquake Emergency Operational Mode. The Los Angeles County Fire Department, Los Angeles Police Department, Area ~A~ Fire Departments (Beverly Hills, Culver City and Santa Monica), the Medical Alert Center and the California Highway Patrol were notified as to our operational status. Degraded dispatching was instituted citywide.

At 0435 hours, the Emergency Operations Center was activated.

As a result of the earthquake, one radio repeater site was rendered inoperative. This, however, did not adversely affect radio communications.

One of two 420 kilowatt back-up generators at the Information Services Division did not function properly when electricity was lost following the earthquake. Under an excessive load, the second of the two back-up generators overheated and then it too failed to operate.

The FCCS I computer system at O.C.D. relies on the system at I.S.D. to be operational. Therefore, when the computer system at I.S.D. lost power, the computer system at O.C.D. also went down and "manual mode" dispatching was instituted. This failure occurred at 0505 hours and manual mode dispatching continued until the Department of Water and Power restored the electricity approximately six hours later.

Fire department communications were not interrupted nor adversely impacted with the failure of the computer system.

Following the initial assessment by fire companies conducting their district drive-thru inspections, Division 3 was identified as the area most severely impacted by



the earthquake. Fire companies reported numerous loom-ups, and severe structural damage to many buildings, both residential and commercial. At 0545 hours, Department Command was established at O.C.D. and Mayor Riordan declared a state of emergency.

By 0645 hours, as many as 50 structure fires were reported in addition to numerous ruptures in water and natural gas mains. Power outages were reported city wide.

The Santa Monica Fire Department requested mutual aid, however, this request could not be honored due to the critical state of events within the city of Los Angeles. Two of the six strike teams requested from Region I were subsequently directed to Santa Monica to provide necessary assistance.

Severe damage to several freeways was reported. Many freeways collapsed entirely or were damaged enough to require closure. Landslides hindered the movement of some fire companies in hilly areas as they performed their drive-thru inspections.

Sporadic looting was reported by fire companies. However, it did not appear to be a widespread problem during daylight hours.

By 0700 hours, there were over 100 active incidents being handled by field resources.

The following is a summary of Command Decisions that were made during the initial hours following the earthquake.

1. The entire off-going shift ("C" shift) was held over to provide additional staffing.
2. Disaster Preparedness Section Staff were recalled to staff the Urban Search and Rescue vehicle.
3. The Region I Coordinator (L.A. County Fire) was contacted and six strike teams and one USAR team were requested to respond to Valley Command, which was being established at fire station 88.
4. L.A.F.D. Command Staff was recalled to O.C.D.
5. Fire station 88 was established as the staging area for fire department resources.
6. L.A.F.D. inspectors were recalled to formulate damage assessment teams.



7. Dispatchers were sent to Coldwater to establish a back-up dispatch site.
8. Twenty-six fire companies were deployed into the valley to augment existing division 3 resources.
9. Two additional USAR teams were immediately dispatched to F.S. 88 at the request of Region I.

By 0945 hours, all fires in the valley were controlled and there were no active major structure fires in progress.

Due to severe damage following the earthquake, six valley hospitals closed. The hospitals that closed were as follows: Holy Cross, Oliveview, Northridge, Granada Hills, Kaiser Panorama City and West Hills.

Red Cross Shelters were established within the first twenty-four hours at the following locations: Sylmar High School, Reseda High School, San Fernando Recreation- Center, Canyon High School, Van Nuys Church of Christ, Glendale Armory, Hollywood High School, and Granada Hills High School.

Power began to be restored in several areas of the valley in the late evening and early morning. As power came back on, numerous reports of electrical shorts and live power lines were received.

By the end of the day, there were 18 confirmed deaths and 250 reported injuries, however, the exact number of casualties could not be ascertained.

There were a total of 466 fires reported on January 17. Routinely there are between 30 and 40 fires reported on a daily basis in the city of Los Angeles.

Within the first 24 hours of the earthquake the L.A.F.D. responded to more than 2,200 incidents, which nearly approximates 2 1/2 times the daily average.

Significant Incidents

One of the most significant incidents in terms of life loss occurred at a 3-story, 120 unit apartment complex located at 9565 Reseda Boulevard. Task Forces 70 and 73 were first to arrive on the scene and reported the collapse of a 3-story apartment building. The first floor was crushed in the collapse, reduced to a crawl space of two to three feet. Many of those that perished were buried under collapsed walls and the ceiling.



Ultimately involved in the rescue operation were seven L.A. City Fire companies, an L.A. City Fire USAR team, and USAR teams from L.A. County, Riverside County, Orange County and the State Office of Emergency Services.

Several residents self-evacuated prior to and shortly after the arrival of fire companies. Twenty-five to thirty residents were assisted out of the structure by firefighters. Eight were evacuated by firefighters and USAR teams and then were transported to area hospitals in conditions ranging from serious to critical.

To further assist with locating trapped victims, L.A.P.D. search dogs were brought in. Unfortunately, all that remained trapped had perished.

Sixteen fatalities in all resulted from the collapse of this building.

Another significant incident occurred at the Northridge Fashion Mall. A street sweeper that was working on the first floor of a 3-story parking structure was trapped in his pick-up truck when the entire parking structure collapsed.

An L.A. City Fire USAR team was at the scene but was redirected to the incident occurring on Reseda Boulevard due to the number of lives involved. Light Force 89, Engine 1, Heavy Utility 56 and a Gas Company Crew continued the rescue effort. As the incident progressed an L.A. County USAR team was directed to the location to assist.

Firefighters assisted by the Gas Company crew utilized the 'Jaws of Life', hydraulic jacks, sledge hammers, saws, and the Gas Company's jack hammer to reach the man who was pinned and in critical condition.

Aqueous Film Forming Foam had to be flowed down under the crushed pick-up truck, to prevent the ignition of leaking fuel.

It took firefighters six to seven hours to successfully extricate the man. He was transported to the U.C.L.A. Medical Center in critical condition by Air Ambulance. His condition has since been upgraded to serious.

A significant loss of property resulted from structure fires that occurred in three separate mobile home parks. These three fires simultaneously broke out immediately following the earthquake. The cause of these fires appears to have been the rupture of natural gas valves and/or mains.

Twenty to thirty mobile homes were lost at the mobile home park located at Cobalt and Rinaldi. Twenty-three mobile homes were lost at the park located near the intersection of Olden and Ralston. Sixty-seven mobile homes were lost at the park located at Glen Oaks and Foothill.



Arriving firefighters encountered fire hydrants with little or no pressure. To combat the fires, relay operations and water shuttles were implemented.

Firefighters evacuated all residents and no serious injuries were reported.

Also significant were the ruptures of a large natural gas main and a water main at the intersection of Balboa and Rinaldi. These ruptures occurred immediately following the earthquake.

Subsequent to the rupture, the natural gas main ignited, and five single family homes were consumed in the ensuing fire.

Area residents were evacuated by arriving firefighters and no serious injuries were reported.

At approximately 0520 hours, Engine 97 responded to an incident at 3999 Sunswep Drive in the Studio City area. Upon arriving on scene, Engine 97 reported the complete collapse of a three and four story single family dwelling which was located on a hillside.

Two of the four residents of the home had successfully extricated themselves from the structure prior to the arrival of firefighters. One resident was killed in the collapse and the fourth resident was trapped and in need of extrication. Due to the precarious position of the collapsed structure on the hillside and the continued after shocks, firefighters initially were unable to successfully rescue the still entrapped resident.

By 0900 hours, firefighters from Engines 78 and 97, along with several L.A.P.D.. Officers, had successfully effected the extraction of the trapped resident. The woman had only sustained minor injuries in the collapse of the home.

January 18, 1994

At 0815 hours, the Casualty Information Center reported 2,004 injuries treated and released at area hospitals, 506 hospitalized and 33 deaths.

At 1200 hours on January 18, the DWP (Department of Water and Power) estimated that approximately 95,000 people were still without power and between 50,000 and 100,000 were without water.

The National Guard arrived in Los Angeles and handled looter prevention and fixed post security missions in support of Police Department operations. By 0300



hours on the 18th, 480 Guardsmen and 120 Los Angeles County Sheriff's Deputies had deployed in Los Angeles.

Twenty-nine water tankers were strategically deployed throughout the valley for the purpose of supplying water to fire companies for potential fires. The combined water capacity of these tankers was 78,000 gallons.

Individual tankers were assigned to respond with specified department resources on all incidents. In addition, two Tanker Strike Teams consisting of one Battalion Chief, three tankers (water capacities per tanker range from 1,400 to 5,000 gallons), and two engine companies were deployed to fire stations 106 and 90.

A Tanker Strike Team was dispatched to incidents any time there was an indication that there might be an actual fire. These tankers have multiple 2 1/2" outlets.

Five fire department pick-up trucks loaded with 2,000 feet of 3 1/2" hose were deployed to fire station 88 along with a cache of hose. They could be obtained through O.C.D. if a long distance relay became necessary.

The Community Service Unit of the L.A.F.D. prepared a Press Release detailing post earthquake safety tips. The Press Release detailed safety tips involving the use of unvented heating and cooking devices, natural gas leaks, usage of flashlights as opposed to candles, and chimney precautions.

January 19, 1994

At 0650 hours, the Casualty Information Center reported that as of 2400 hours, 3,762 people had been treated and released at area hospitals, 526 people were admitted, and 40 people had been confirmed dead.

At 1530 hours, the Department of Water and Power reported that the water system in the valley had approximately 3,000 leaks as a result of the earthquake. It was further reported that it would take between two and three months to repair all of these leaks.

At 1700 hours, twelve L.A.F.D. ~200 series" engines were assigned to assist the DWP with water main pumping operations.

Damage Assessment Command organized thirty-six assessment teams, each consisting of Fire Prevention Bureau Inspectors. The thirty-six teams corresponded with the thirty-six first-in districts in Division 3. Each team was assigned a respective first-in district.



The objective of these assessment teams was to determine the total number of buildings damaged, total number of dwelling units affected and to estimate the total number of residents displaced by the earthquake.

The initial assessments were completed on January 19, 1994. Following these initial assessments, teams will conduct a more thorough inspection throughout the city. These inspections are anticipated to take several weeks to complete.

The L.A.F.D. provided the Goodyear Center with ten post earthquake safety messages in English and Spanish. These messages were displayed on the Goodyear Blimp throughout the evenings of the 19th and the 20th.