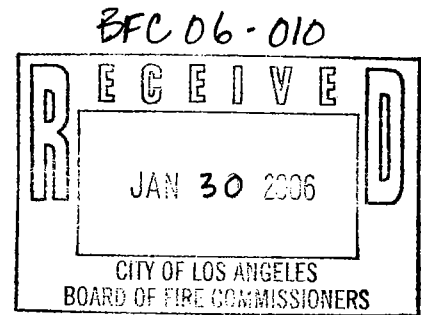


# LOS ANGELES FIRE DEPARTMENT



WILLIAM R. BAMATTRE  
FIRE CHIEF

January 13, 2006



TO: Honorable Board of Fire Commissioners  
City of Los Angeles

FROM: William R. Bamattre, Fire Chief

SUBJECT: **DEPARTMENT OPERATIONS AT THE TOPANGA BRUSH FIRE  
SEPTEMBER 28, 2005 TO OCTOBER 4, 2005**

As a result of a discussion at the Board of Fire Commissioners' meeting on October 3, 2005 and subsequent meetings, direction was given to provide information relative to the Topanga Brush Fire, which began on September 28, 2005. This report will include an overview of the incident and address issues relative to deployment of resources, evacuation, feeding personnel, rest/personnel rehabilitation, relief of personnel, and briefly address the cost apportionment process.

## Incident Overview

On September 28, 2005, at 1350 hours, Los Angeles County Fire Department dispatch received a report of a brush fire at the Simi Valley Freeway, (Route 118) and Topanga Canyon Road. Los Angeles County and Ventura County Fire Departments and the Los Angeles Fire Department (LAFD) jointly dispatched full brush assignments to the area, which is considered an Initial Action Zone, where all three Departments will respond to what is considered a mutual threat.

First-arriving units reported approximately two acres of brush and grass burning with a rapid rate of spread. Based on the strong northeast wind conditions, a large order of equipment and resources for structure protection was initiated, along with LAFD Incident Management staff and Los Angeles County Incident Management Team (IMT) 3. Within the first three hours, a major fire situation had developed with the potential for extensive property destruction and numerous casualties.



Unified command was established with Los Angeles County and Ventura County Fire Departments, and the LAFD. Unified Commanders made the decision to order a California Department of Forestry and Fire Protection (CDF) Agency Representative, a significant number of resources under the California Fire Assistance Agreement (Attachment G), and a CDF Incident Command Team.

Due to rate of spread, initial control objectives were defensive, and centered on structure protection and evacuations. In addition, the Unified Commanders established control objectives, which consisted of keeping the fire:

1. North of Highway 101
2. South of Highway 118
3. East of Westlake Boulevard
4. West of Valley Circle

At the height of the fire, 2,790 people were working throughout 7 Branches and 21 Divisions before containment was reached on October 4 at 1800 hours.

Total acreage was 24,175 with jurisdiction involving Los Angeles County and Ventura County Fire Departments (State Responsibility Direct Protection), the LAFD, and National Park Service. During the course of the incident, all control objectives were met.

### **Damage and Savings**

Property damage included three homes, three commercial structures, several out buildings, and various other property improvements. Property losses were estimated at \$2,049,000. Estimates of property saved where actual fire suppression activities were taken is \$804,250,000. Property values saved due to brush clearance, adequate defensible space, and fire-resistive construction are estimated at several billion dollars.

The following factors contributed to the severity of the incident:

Weather – A high-pressure ridge located offshore from Northern California created a strong offshore wind condition. Although not a true Santa Ana Wind, the winds presented a strong northern influence for the next 36 hours.

Weather readings from the closest Remote Area Weather Sites reflect conditions at the time of ignition:

**THOUSAND OAKS**

Temperature: 93  
Relative Humidity: 12%  
Wind: 14-31 mph from the Northeast

**SIMI VALLEY**

Temperature: 93  
Relative Humidity: 12%  
Wind: 16-23 mph from the Northeast

**AGOURA (Chesbro)**

Temperature: 89  
Relative Humidity: 19%  
Wind: 24-50 mph from the Northeast

**Fuels** – The fuels in the area include annual grasses, Native California Chaparral, Laurel Sumac, Chamise, Sages, and Ceanothus. The grass component averaged 36 inches due to the significant rainfall of 2004. The live-fuel moistures were between 62% and 60%; critical fuel moisture levels occur at 60% and below.

**Fire Behavior** – The fire originated on the north side of the 118 Freeway with flame lengths of 3-6 feet. The strong winds caused the fire to quickly spot across the freeway ¼ mile to the south, with the fire coming into alignment with the wind and pre-heated slopes. Flame lengths increased to 15-60 feet with a rapid rate of spread (5,280 to 9,600 feet per hour). The fire made its greatest run traveling approximately 7 miles in 7 hours. The fire spotted ¼ to 1 mile ahead of the fire front.

On September 29, the winds decreased to the point that the fire behavior was dominated by the terrain rather than the wind. This did not reduce the severity of the situation due to the dry fuels and hot weather. On September 30, the fire continued to burn as the previous day with influence from a newly established on-shore wind.

**Special Hazards** – The Rocketdyne Facility was a defense contractor dealing with rocket propulsion technology. There were three buildings lost on the property during the fire, but no hazardous materials were reported compromised.

**Area Fire History** – This area of Southern California has a significant history of large fires in September, October, and November. The following fires all occurred during this time period:

Devonshire/Parker	1967	23,093 acres
Clampitt	1970	115,537 acres
Wright	1970	28,201 acres
Oat	1981	17,787 acres
Dayton Canyon	1982	43,096 acres
Calabasas	1996	12,512 acres
Simi	2003	107,570 acres

**Fire Potential** – Due to the known fire history, the responding fire agencies have aggressive initial attack plans. It is widely known that these fires have a tremendous potential to cross Highway 101 at an area just east of Las Virgenes Road and burn to the Pacific Ocean. This became a concern of the Unified Command and a contingency plan was put in place with LAFD Strike Teams on the eastern and southern flanks of the fire. The fire was successfully held to the north of Highway 101 by Branch II resources commanded and staffed by LAFD resources.

### **Deployment of Resources**

Within minutes, the initial LAFD Incident Commander divided the fire into Branches and Divisions as the fire quickly jumped the 118 Freeway and was impacting Los Angeles and Ventura Counties. Unified Command was established as the other jurisdictions arrived. The original Command Post was set up on the 118 Freeway and was moved at 2,100 hours to the Agoura Hills Community Center.

The Unified Command component was effectively planning and organizing for the fire's potential run to the ocean. The Unified Commanders identified control objectives that were effectively utilized for the duration of the fire. As they were doing so, fire-ground operations were effectively being directed by Operations. By 0100 hours on September 29, the fire had grown to approximately 3,500 acres.

As the size of the fire increased, the decision to move the Command Post to Conejo Creek Park in Thousand Oaks for the Command Post was made by the Command Team. Numerous offensive stands were made in an effort to keep the fire from burning homes. Messages from Branch Directors confirmed the fact that the firefighting had been more severe than first thought. These Branch

Directors called for numerous Strike Teams to augment their existing resources, all committed to protecting structures.

The winds during the initial stage of the fire caused the affected area to rapidly grow in size. This caused deployment problems in areas such as Bell Canyon, Box Canyon, and Woolsey Canyon because of the lack of safety areas due to the tremendous fuel load located in these canyons. These areas presented the largest potential for casualties and possibility of property loss. Concerted efforts by the Unified Command Teams and field resources were able to establish containment lines and minimize structure loss to three homes, and a few out buildings. The final burn area amounted to 24,175 acres through numerous responsible agency jurisdictions.

At the height of the fire, the LAFD committed:

- 85 Engines
- 14 Battalion Command Teams
- 4 Helicopters
- 4 Battalion EMS Captains
- 6 Rescue Ambulances
- 2 Command Post Vehicles
- 45 Overhead/Management Personnel

The great effort provided by LAFD firefighters was the difference between the fire stopping at the 101 Freeway or traveling to the Pacific Ocean.

Logistics worked diligently to get the incident initial base up and running, and when they did it supported the incident well. This included the Spike Camp at Fire Station 106 in West Hills.

### **Evacuation**

The fire moved at a rate of 1 mile per hour in the initial phases of the incident and immediately moved through populated areas. This caused the need to evacuate residents in areas of Los Angeles and Ventura Counties. In a small area of City of Los Angeles located west of the Chatsworth Reservoir, approximately 2,500 residents were evacuated with the assistance of the Los Angeles Police Department and the Department of Animal Services. A total of 32 City of Los Angeles residents were sheltered at Canoga Park High School, while over 250 horses were sheltered at Pierce College and Hansen Dam Recreational area.

## **Meals**

It is the Department's policy to provide meals to members when they are involved in extended incidents; this includes brush fires. Due to the intense nature of initial attack at wind-driven brush fires, and the knowledge that logistical support takes time to put in place, the Department has purchased Meals Ready to Eat (MRE) and distributed them to all fire stations throughout the City. As per Departmental Bulletin 05-10, Brush Fire Operations – 2005 (Attachment A), "MRE's may be the only available food for the first 72 hours". MRE's have become a staple for our LAFD Urban Search and Rescue personnel, and are consumed daily by our armed forces. When LAFD Urban Search and Rescue personnel were deployed to New York during the World Trade Center disaster, and to Louisiana and Mississippi for the Hurricane Katrina disaster, MRE's were the only food choice available during rescue operations.

In addition, the Supply and Maintenance Division of the LAFD has contracts with vendors to provide meals to large-scale incidents. These contracts were used during the Topanga Brush Fire.

During the Topanga Brush Fire, initial attack resources were committed directly from their respective fire stations or pre-deployment assignments. Subsequent resources were ordered in Strike Team (5 engines) configuration and directed to a meeting point. Due to the fire weather on September 28, the LAFD had resources pre-deployed to augment normal coverage levels in the event that a brush fire ignited.

Due to the pre-deployed nature of the resources, each engine carried MRE's provided by the Department. In addition, Supply and Maintenance Division ordered sack lunches beginning September 29 (Attachment B), to be delivered to Fire Station 106. The vendor that provides these lunches is used throughout the Los Angeles area (including the Angeles National Forest Fire resources) as a meal provider to emergency personnel at large incidents. Although these food options were in place, residents of the involved area elected to provide food to the firefighters. When presented with the option of an MRE, sack lunch, or home-cooked meal, many of our firefighters ate the home-cooked meal.

Fire Station 106 was designated as a Spike Camp for the incident and provided food to Strike Team Leaders for distribution to LAFD resources deployed throughout the east side of the fire.

## **BRIEFINGS**

It is the Department's policy to provide a safety briefing to all personnel, which includes the use of Lookouts, Communications, Escape Routes, and Safety Zones. This briefing also includes stated incident objectives and emphasizes safety. This policy is stated numerous times within the Department library, in documents such as the Incident Response Pocket Guide (Attachment C), created by the National Wildfire Coordinating Group (NWCG), which is a government body that establishes policy for wildland firefighting. This Pocket Guide has been distributed to all members. In addition, briefings and members' responsibilities are included in the Field Operations Guide, ICS 420-1 (Attachment D) developed by FIRESCOPE, a multi-agency California fire service group established to develop consistent inter-agency management of major incidents, is included in all apparatus inventory. The Wildland Fire Suppression Tactics Reference Guide (Attachment E) developed by the NWCG, is provided to all members who have been instructed in Strike Team Leader/Division Supervisor positions.

The information referenced above is emphasized at annual brush training provided by the In-Service Training Section. Additionally, the importance and substance of a briefing is continually stressed at Chief Officer Continuing Education Program Brush Training, as well as Company Officer Continuing Education Program. Briefings are normally provided at the beginning of each operational period to Division Supervisors and Strike Team Leaders. After this briefing takes place, the information is given in subsequent briefings to the Engine Captains and crews.

During the Topanga Brush Fire, safety briefings were provided to all members as a way to ensure firefighter safety. Briefings were conducted at the beginning of each operational period at the Command Post located in Thousand Oaks, by the IMT. Briefings at the Command Post were provided to Branch Directors, Division Supervisors and Strike Team Leaders. However, due to the location of LAFD resources protecting the interests of the City of Los Angeles, over 20 miles from the Command Post, the Incident Commander decided that only Branch Directors and Division Supervisors would attend the operational briefing. The information provided at the Operational Briefing was subsequently given to all Strike Team Leaders, Engine Captains and crews in the form of a daily operational briefing.

This information was not the only briefing provided. Engine Captains provided safety briefings to their crews upon arrival at a new location to identify Lookouts, Communications, Escape Routes, and Safety Zones. A safety briefing can and did occur anytime the supervisor deemed necessary to provide for firefighter

safety, which can be directly attributed to the infrequent nature of firefighter injuries on the Topanga Brush Fire.

### **Relief**

LAFD policy for relief at large-scale incidents provides relief after up to 7 days of deployment, or a shorter time period at the discretion of the Incident Commander or Agency Representative. This policy is found in Departmental Bulletin 05-10, Brush Fire Operations – 2005, (Attachment A) and is reinforced during Chief Officer Continuing Education Program brush training, Company Officer Continuing Education Program and Department-wide annual brush training.

Due to the Topanga Brush Fire's involvement in the City, the Incident Commander, in consultation with the Department Operations Center, decided to relieve personnel at the fire on a daily basis. This decision took into consideration firefighter safety, as well as the fiscal impact upon the City of Los Angeles in the form of paid overtime.

### **Work/Rest Ratio**

The LAFD adheres to the National Work/Rest and Length of Assignment Standard. The NWCG is responsible for establishing the rules of engagement for wildland fires. The Interagency Incident Business Management Handbook, Chapter 10, Section 12.7 (Attachment D) specifically discusses Work/Rest Ratio Guidelines. This Standard states that a maximum deployment of 14 days and a work/rest ratio of 2:1 is ideal. That is 16 hours of work and 8 hours of sleep in a 24-hour period. However, if the need arises to exceed this ratio, the Incident Commander or Agency Administrator must document justification. LAFD policy is a maximum deployment of 7 days with efforts not to exceed a 16-hour workday. However, faced with an incident that jeopardizes public safety, this Standard will be used as a guideline as designed.

During the Topanga Brush Fire, public safety was threatened; hundreds of homes faced possible destruction. This threat equated to the possibility of countless casualties and millions of dollars of potential property loss. Due to the extreme nature of this incident, the LAFD, as well as the other involved agencies committed to this incident faced extreme circumstances. To address the magnitude of the incident and provide for public safety, the LAFD and other responding fire agencies did exceed the work/rest ratio during the Topanga Brush Fire. To ensure firefighter safety, the decision was made to exceed the work/rest ratio, but the Incident Commander did so with the knowledge that firefighters did receive rest during downtime and were relieved on a daily basis.



### **Cost Apportionment**

The Finance/Administrative Section of the Unified Command began to formally address cost apportionment on Saturday, October 1, 2005. Personnel from the Bureau of Administrative Service's Management Services Section were requested to attend these meetings and remained at the Command Post for the duration of the incident to participate in this important function and assist the Incident Commander. They attended meetings with the Incident Commander and representatives from the other agencies to reach agreement on the costs and commitments of the various Departments.

### **CONCLUSION**

The LAFD provides a critical service to the public under extreme conditions. During these times when we are called to action, we are placed in situations that are at best less than comfortable, and often life threatening. During the Topanga Brush Fire, the firefighters of the LAFD rose to the occasion with unprecedented success in saving lives and property.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "William R. Bamattre". The signature is fluid and cursive, with a large, stylized initial "W".

WILLIAM R. BAMATTRE  
Fire Chief

WRB:gw

Attachments