# **MARPLE BRANCH II REVIEW REPORT**

# **Burnout Operation**

**Pacific Southwest Region Angeles National Forest** 

**California Department of Forestry** and Fire Protection Sierra South Region

Los Angeles County Fire Department

September 2, 1996

Thom E. Myall

<u>Anom & Myall</u> Signature

**Chief of Party** LPF

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## **MEMBERS**

**Robert Green - CDF** John Harris - LAC Frank August - LAC

## MARPLE BRANCH II INCIDENT REVIEW

### I. REVIEW

The team members were ordered by the Marple Incident Command Team. The assignment was to review the burnout incident and to find out what occurred.

- \* was the firing operation a direct contributor to the incident
- \* was the main fire the direct contributor to the incident
- \* what were, if any violations of the 10 standard orders and 18 situations or other violations of policy

Review Team members were contacted by their respective dispatch procedures and requested to assemble at the Marple ICP by 1630 Thursday, August 29, 1996.

The Review Team Members, consisting of Thomas E. Myall, Robert F. Green, and Frank August, were briefed at 1700 Hrs by CDF Agency Representatives, Gregg Scott, Steve Heil, Bill Trowbridge, and LAC IC Bob Lee. After this briefing the Review Team obtained a copy of all interviews and data collected up to that time. The team then reviewed this information and constructed a list of names using the IAP and statements of persons involved. Team members interviewed these individuals and visited the site as a team with the individual involved. Battalion Chief John Harris joined the team on August 30, 1996.

The Review Team members consisted of:

Bob Green, CDF, Asst Chief, Riverside Thom Myall, USFS, Forest Fire Management Officer, Los Padres National Forest John Harris, Battalion Chief, Los Angeles County Fire Department Frank August, Captain, Los Angeles County Fire Department

#### **II. NARRATIVE**

#### **SUMMARY**

At the Marple Incident on Wednesday, August 28, 1996 at approximately 1430 hours, a situation occurred in Branch II, Division G. The Division G supervisor received second degree burns on his left ear and his vehicle was damaged on the left side. In addition, six hand-crews were forced to abandon their line construction assignment, and make an emergency exit to the Crew Carrier Vehicles (CCV). The upper most five crews were able to reach their CCV in a timely manner. The sixth crew that was committed to the lowest point in the operations was impacted by heat and smoke on their exit and incurred flame impingement to their vehicle upon their exit.

An unauthorized burn-out operation had taken place in Division E. The main fire spread was influenced by the burn-out operation. After the review, it is unclear if the burn-out operation caused Division G's "Close Call."

Therefore, this review board has listed all relevant findings.

#### **NARRATIVE**

Between 1100 - 1200 hours, Division G and H, located along the Old Ridge Route (ORR) combined their resources of six hand-crews that were composed of four California Department of Forestry (CDF) crews and two Los Angeles County Fire Department (LAC) crews. The hand-crews task was to construct a cold-trail line east from Drop Point (DP) 5 as far as possible. Division G Supervisor conferred with his Crew Supervisors and Division H to comprise a plan to perform their assigned task in conjunction with a safety briefing. Items handled were to assign Strike Team Leader (STL) 9379G as a Lookout, and move all vehicles to a safer location.

The hand-crews were performing line construction in a leap frog method to maximize resources. Division G then set out ahead of the crews to scout the line.

At approximately 1430 hours, Lookout STL 9379G notified Division G of a fast approaching fire from the south in Division E. Division G immediately ordered all six hand-crews to return to the their parking location. When the first five crews arrived at their CCV's, Division G ordered them to leave the area and not wait for him. The crews exited north on ORR to Highway 138, and then south to Interstate 5 to the firing operation where they staged in case they might be needed. The sixth crew committed the furthest from the parking area was impacted by heat and smoke both in hiking-out and arriving at their CCV. Flame impingement occurred to the CCV upon exiting from DP 5.

Division H and Lookout STL 9379G waited for Division G who was making his way back to his vehicle. Division G attempted to make access to his vehicle but retreated due to a heat wave, smoke and ash, forcing him to lay down. Division G removed his shelter from his pack, but did not open it. During this time, Division G noticed that previous burnt stubs were glowing around him due to these conditions. After a short period of time, conditions improved and Division G made a face to face contact with Division H and STL 9379G, at which time exited together on ORR to Templin Highway.

Division E Supervisor was constructing a line using dozers and hand-crews when he noticed a spot become active with rapid spread to the north and to the west approaching Interstate 5. Division E ordered several strike teams to respond to Interstate 5 north of Templin Highway. Division E met with Operations I and STL 9331C to develop a plan for holding the fire east of Interstate 5, and only fire out if absolutely necessary.

Division E was aware of several crews in Division G above the active fire in Division E.

After Division E tried unsuccessfully to reach Division G on the tac net, he decided to drive back up to ORR to find and notify Division G of the situation.

Operations I conferred with Angeles National Forest (ANF) Battalion Chief (BC) 31 regarding the threat of the active fire jumping Interstate 5. ANF BC 31 expressed concern and informed Operations I that there were very few control points available west of Interstate 5.

Operations I then requested LAC BC 30, via tac net, to meet him at scene for a possible job assignment.

LAC BC 30 arrived and was briefed by Operations I of a possible firing operation. Four single increment CDF Engines had also prepared for a firing operation. Operations I informed LAC BC 30 that he was not comfortable with firing as he was not sure if personnel were located above the proposed burn-out operation. LAC BC 30 assured Operations I that he had unsuccessfully attempted to raise resources on the IAP 204 Communications Summary assigned frequencies, he, LAC BC 30, had assumed no personnel were above the proposed burn-out operation.

LAC BC 30 initiated the burn-out operations by firing a flare pistol, into the brush, and was joined by four CDF single engines and ANF BC 31. Operations I reported that personnel were using various firing methods, pistols, drip torches, and fusee's simultaneously over an area covering as much as 200 yards. Operations I attempted to stop the burn-out operation, however, he was only able to convey his decision verbally, face to face, to a few units.

After numerous interviews and gathering of information and statements, the Review Board was able to determine that all personnel in Division G were hiking out prior to the burn-out operation.

Operations I once again, went to LAC BC 30 and stated he was still not comfortable with the firing operation. LAC BC 30 was adamant that the firing operation must continue.

After a period of time, CDF STL 9331 went to Operations I, LAC BC 30 and ANF BC 31 and requested that the burn-out operation stop until verification could be made that all personnel above the burn-out operation exited the area. LAC BC 30 and ANF BC 31 refused to stop the firing operation.

This burn-out operation went on for approximately 2 hours tieing into a shear rock outcropping. The burn-out operation distance was 2 miles. This line was secured under LAC BC 30's direction during the night using dozer and crews to ORR.

Division E had returned to ORR and was able to raise Division G and H and eventually meet them on ORR.

## AFTER-THOUGHTS

The end results of the burn-out were textbook, as far as success.

The burn-out methods were not according to generally accepted firing procedures.

Only ICS 204 without frequency summary at bottom should be used in the IAP. The ICS 205 Communication Plan should be the only document with frequencies listed in the IAP.

## **III. CAUSAL & CONTRIBUTING FACTORS**

## CAUSAL FACTORS

- A. Division G ordered CCV's moved from IAP location (Drop Point 5) to a safer location south approximately 150 feet.
- B. Division G deployed lookouts and conducted a safety briefing prior to going to work.
- C. Division G assigned crews to cold trail fireline east of Old Ridge Road.
  - 1. Main fire became active in Division E.
  - 2. Division G ordered all 6 crews back to the CCV's area.
  - 3. All resources above burnout operation were not informed.
  - 4. Battalion 30 began burn-out operation.
  - 5. Inadequate burn-out plan
    - No anchor point
    - No lighting boss
    - No objectives
    - Burnout not approved by Operations 1
    - Acting Lighting Boss did not have control of resources
    - No communications plan
  - 6. 6 crews exited in CCV's to the North on the Old Ridge Road.
  - 7. Division G burned left ear second degree.
  - 8. Division G's vehicle damaged as a result of heat and flame.

## **CONTRIBUTING FACTORS**

- 1. Incident Action Plan Problem Areas
  - Communications Plan ICS 205 Frequencies were different than the Division Assignment List-ICS 204 Radio Frequencies.
  - Incident Map did not have division breaks identified.
- 2. No Air Support available due to priorities in Divisions C and D.

## FIRE ORDERS - COMPROMISED

- 1. Fight fire aggressively, but provide for safety first.
- 2. Ensure instructions are given and understood.
- \*3. Remain in communication with crew members, your supervisor and adjoining forces.
- 4. Retain control at all times.
- 5. Stay alert, keep calm, think clearly, act decisively.
  - \* MOST IMPORTANT FACTOR

## WATCH OUT SITUATIONS - THAT APPLY

- 1. Fire not scouted and sized up.
- 2. Uninformed on strategy, tactics and hazards.
- 3. Instructions and assignments not clear.
- \*4. No communication link with crew members or supervisor.
- 5. Constructing line without safe anchor point.
  - \* MOST IMPORTANT FACTOR

### **IV. SUPPORTING DATA**

#### WITNESS STATEMENTS

Division G and H Branch II

- \* Division G Supervisor Lyle Drenth, CDF
- \* Division H Supervisor Jack Murassian, NPS, Hawaii National Park
- \* STL 9383G Captain Howell, CDF
- \* Norco 2 Captain Bruce Fosdike, CDF
- \* Norco 3 Captain John McLain, CDF
- \* STL 9379G Captain Bob Reed, CDF
- \* Porta La Cruz 1 Captain Vince O'Neal, CDF
- \* Porta La Cruz 3 Captain Mike Ng, CDF
- \* LAC Crew Supervisor 27 FCS Jerry Littlefield, LAC
- \* LAC Crew 19-3 FCS Mark Killingstad, LAC
  - LAC Crew 16-4 FCS David Wargnier, LAC
- \* Branch II Director Hal Mortier, USFS
- \* Crew Truck ORR observers FCS Jonathan Miller, LAC FCS Tom Miller, LAC LAC Crew 25
  - \* Denotes written statement or interview taken

#### WITNESS STATEMENTS

Division E Branch II

- \* Operations 1 AC Dave Horn, LAC
- \* Division Supervisor E Chuck Nicola, ORCO
- \* LAC BC 30 Bob Grafton, LAC
- \* ANF BC 31 Terry Molzain, ANF
- \* RXI Captain Dennis Green, LAC
- \* STL 9331C BC Kevin O'Leary, CDF
- \* Safety Officer Captain Don Schwaiger, LAC
- \* MVU E33 Captain Fae Mary Bryn, CDF
  - \* Denotes written statements or interview taken

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- 10. Burning Out:
  - a. Notify Division/Group Supervisor of intent to Burn Out/Fire Out.
  - b. Division/Group Supervisor shall notify the OSC or IC.
  - c. Burning Out for Immediate Defensive Need:
    - (1) Identify area to burn out(i.e., from point "A" to point "B").
    - (2) Ensure no persons are in the area to be burned out (visualize area).
    - (3) Anticipate direction of spread and spotting potential. (wind vs. slope)
    - (4) Ensure adequate resources are available to handle spot fires.
    - (5) Ensure adjacent resources are aware of spread potential and are prepared for safety and structure protection.
    - (6) Have hoseline in place around defensive need object.
    - (7) Plan and establish an escape route.
    - (8) Ladder the roof, if a structure.
    - (9) When approaching fire is in close proximity and in sight, begin defensive firing operation.
  - Burning Out for line construction purposes:
    Camp Crew Superintendent/Supervisor may perform burning out operations during line construction, using either 2' Method or Parallel Method (5-50').
- 11. Backfiring Operations:
  - a. Request approval from the OSC or IC.
  - b. Assign Backfiring Operations Supervisor (must have the experience to carry out safely).
  - c. Identify area and establish plan. Identify starting point and stopping point. Estimate expected time of backfiring and notify OSC or IC.

V10-C10-S1 (11/01/94)

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CONTROL OPERATIONS

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FINISH LINE CONSTRUCTION

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SYSTEM/CACHE	CHANNEL	FUNCTION	FREQUENCY	ASSIGNMENT	REMARKS
NICC	1-5 1 LAC 45	JUMMAND	168,100 RX 170,450 TX	IC, OPPS, DIV. SUPV.	
N ICC	FS 2 LAC 39	TAC 1	168.050 (TX/RX)	DIV A/B	
NICC	FS 3 L& 40	TAC 2	168,200 (TX/RX)	DIV C/D	
NICC	FS 4 LAC41	TAC 3	168,600 (TX1ex)	DIV E/F	
LAC	1-25 S L& 2	TAC 4	154.340 (TX/RX)	DIV G/H	
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