



After Action Report Bully Incident

CA SHU 006248

July 11 – 23, 2014

CAL FIRE

Incident Management Team 6

Brian Estes, Incident Commander





Executive Summary

Fire Environment

Location

The Bully Fire started southwest of the community of Ono, south of Platina Road near the intersections of Roaring Creek and Sargent roads at 40' 25.188" x 122'.43.767". The fire quickly spread to the north, spotting across Platina Road and spread along Duncan Creek Road.

The general fire area is centered on the Duncan Creek drainage and the Ditch Fork and East Fork of Duncan Creek. The Duncan Creek flows south out of the Trinity Mountains on the county line between Shasta and Trinity Counties.

The flanks of Duncan Creek are very steep and dissected by many side drainages and gulches. Slope steepness ranges from flat to 160% with mostly southern aspects. Elevation ranges from 1600' near the point of origin to 5500' near Lookout Peak.

Fuels

Fuels on the Bully fire are diverse and varied. The origin of the fire was in grass and scattered gray pine with occasional patches of brush. The herbaceous fuels were completely cured, and brush fuel moisture was approaching critical levels.

According to the SHU fuel moisture report for 6/15/2014, the moisture content was between 82-88% in manzanita. It was likely much lower on the day the fire started. 80% is considered critical.

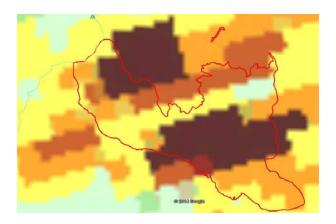
As the fire progressed, it moved into chamise chaparral and manzanita under timber reproduction. The fire intensity of the fire in this fuel type was extraordinary. Air Attack reported flame lengths in excess of fifty feet in several instances.

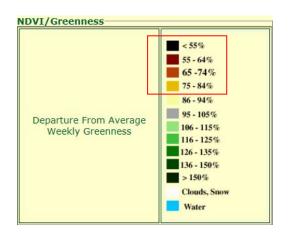
The fire continued to spread up the Duncan Creek drainage and moved into an area of tree plantations and a second growth timber stand of predominantly ponderosa pine, approximately 100' tall. The timber had partially burned in the 2008 Deer Lick fire so it did not have a high level of dead and down fuels.

The most representative Rothermel fuel models on the Bully Fire are SH7 Very High Load Dry Climate Shrub, GR2 Low Load Dry Climate Grass, TU5 Very High Load Dry Climate Timber-Grass-Shrub and TL8 Long Needle Litter.



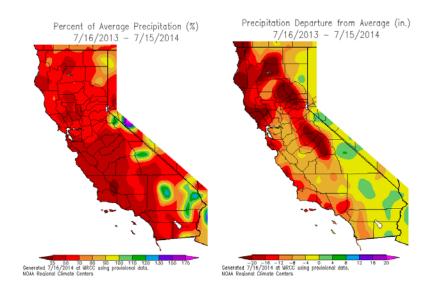
"Greenness" of vegetation as sensed from space by Modis indicates that the fire area is well below the greenness average for this date. This is an indicator of the advanced seasonality of the fuels and health of the vegetation, corroborating the idea that the fire season is already at Fall levels in mid-July.





Climatology

On the day the Bully Fire started, Northern California was in the middle of the driest year in recorded history. Rain and snow fall levels over the winter were less than 50% of the average.





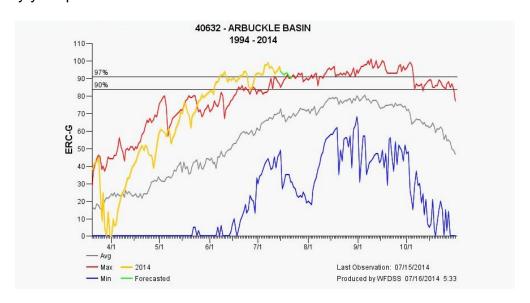
The U.S. Drought Monitor showed the area around the fire to be in "Extreme Drought" and "Exceptional Drought".



This severe lack of rainfall has resulted in live and dead fuel moistures being at critical levels three to four months earlier than normal. Fire activity normally experienced during the peak of fire season in September or October began to be seen in June.

The Energy Release Component (ERC) of the National Fire Danger Rating System, a progressive measure of fuel dryness in all classes, has been above historical records since mid-May and setting records every day since

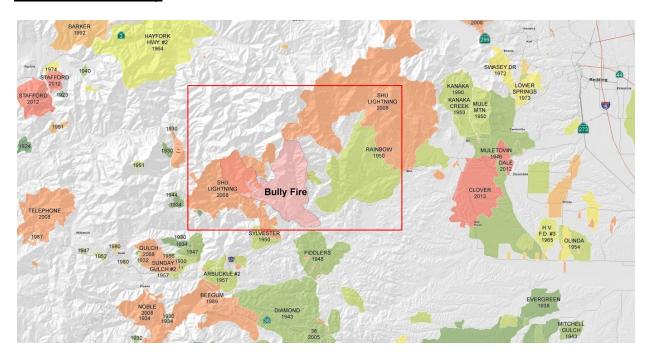
This includes the day the Bully Fire started, when the Arbuckle Basin RAWS local ERC was 100. This is well above the 97th percentile of all readings for ERC near the fire for the twenty year period 1994-2014.



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Area Incident History



Ownership

| Bureau of Land Management (BLM) | 3,338 acres |
|--|-------------|
| Private Land - Sierra Pacific Industries (SPI) | 2,440 acres |
| Private Land - Crane Mills | 1,352 acres |
| Private Land – Other | 4,877 acres |
| State of California Lands Commission | 654 acres |

Incident Potential

The local RAWS station at Arbuckle Basin had recorded a period of extreme dryness in the days and weeks prior to the Bully Fire. Since June 26^{th} the relative humidity remained below 55% 24/7 for the entire period.

In the 72 hours immediately prior to the fire starting, the relative humidity remained below 32% 24/7 for the entire period. This constant dryness has the effect of drawing down moisture that was already at extreme low levels in the large diameter and living fuels.

In addition, resources assigned had increased response times due to the remoteness of the fire's location.



Values at Risk

Values at risk within the fire perimeter included private residences and outbuildings in the Platina, Wild Turkey, Bully Choop and Sunny Hill Road areas, undeveloped private property, Sierra Pacific Industries and Crane Mills commercial timber values including thirty-year old plantations as well as BLM lands within State DPA.

Fire Behavior

When the fire established itself in the brush, spread rates were witnessed at thirty feet per minute with ten foot flames lengths. Spotting distance was up to one-third of a mile. There were no active crown runs, but individual and group tree torching occurred. With ERC's initially above the 97th percentile, extreme fire behavior occurred with relative humidity as high as fifty percent. This highlighted the impact of this season's significant low fuel moistures, especially when coupled with slope and alignment.



Contingency Plans

A Contingency Branch was established and staffed to scout and plan for both the construction of secondary lines in direct support of operational objectives, as well as to perform strategic planning should the fire escape the operational control objectives.



Secondary lines were initially constructed and then successfully utilized as final fireline maintaining established control objectives. Contingency lines were also placed in strategic locations surrounding the fire's control objectives by opening historical fire dozer lines and fire area forest road structures.

Included was the development of action plan decision points, travel plans, road signage, pre-designated drop points and written tactical contingency action plans with maps.

Initial Actions

Report

On July 11, 2014 at 1537 hours the Bully Choop Lookout called in a smoke report in the area of Platina Road and Yolla Bolly Road in Ono, California.

Response

The SHU ECC proceeded to dispatch a high wildland response to the scene.

The fire was burning into a sparsely populated rural subdivision at the base of the Coast Range in western Shasta County. The first arriving engine company reported thirty to forty acres of brush and oak woodland involved, with structures threatened.

The initial arriving CAL FIRE Battalion Chief augmented the resource order for the fire due to burning conditions, fire spread and the remote location of the incident.

Control Objectives

A command structure was established for the incident with the priorities being structure defense and perimeter control.





Initial attack actions included direct attack on both flanks of the fire from the origin with both ground and air resources. The initial objective was to hold the fire south of Platina Road.

The Shasta County Sheriff's Department coordinated evacuations of the residents in the area and the California Highway Patrol, along with the Shasta County Public Works Department implemented road closures in the fire area.

An Incident Command Post was established east of the incident along Platina Road.

The fire continued to resist control efforts as it became established in the Duncan Creek drainage.

At approximately 1900 hours it was evident that the fire would likely transition from extended attack into a major fire.





Major Incident Transition

Team Activation

Incident Management Team 6 (Estes) was activated at approximately 2200 hours on Friday July 11th. The IMT Conference Call with Northern Operations occurred at 2300 hours. Team members began travel from their Home Units. There was a supplemental resource order reconciliation conference call at 0030 hours on Saturday July 12th.

Team 6 members began arriving during the overnight hours of July 11th and embedded in the Unit's extended attack incident management organization to assist wherever possible. Well over half of the Team attended the 0700 hour Operational Briefing conducted by the Unit's extended attack incident management organization. This included all Command and General Staff positions.

Team Transition

A formal in-brief transition meeting was held in the Mount Shasta Hall at the Shasta District Fairgrounds in Anderson, CA at 1000 hours on Saturday July 12th. IMT 6 facilitated the meeting as requested by the Unit Agency Administrator.

The Team's Plans and Operations Sections engaged with the Unit's extended attack incident management organization to conduct the incident planning cycle and conducted both the ICS-215 process and Planning Meeting.

Incident Management Team 6 assumed responsibility for Incident Command at 1800 hours the same day.

Incident Base

An Incident Base was established at the Shasta District Fairgrounds in Anderson, CA.

Staging Areas

Staging areas were established at both Incident Base (Bully) and Shasta County Fire Station # 57 (Platina).

InciNet, Clerical and GIS and NICS

InciNet and NICS support were both established and integral to incident success. Clerical and GIS support was provided by Tozier's Fire Support and Deer Creek GIS respectively and both vendors provided excellent services.



Incident Summary by Operational Period

Initial Attack

| Friday, July 11th | Total Resources | Total Personnel |
|-------------------|-----------------|-----------------|
| Engines | 31 | 93 |
| Hand Crews | 2 | 32 |
| Dozers | 11 | 22 |
| Water Tenders | 7 | 14 |
| Aircraft | 14 | 26 |
| Totals | 65 | 187 |

Weather

Hot and dry conditions prevailed at time of ignition. The Arbuckle Basin RAWS approximately fifteen minutes after dispatch reported Temperature 88, RH 22%, Wind Speed 12 mph with gusts to 27 mph from the east, with a 10 hour fuel moisture of 3%.

Narrative

The fire crossed Platina Road within the first hour of the incident and continued to burn north into the Duncan Creek Drainage. There were significant uphill runs with short range spotting.

Initial and extended attack resources completed and held fire lines south of Platina Road throughout the first burning period. They were successful and limited further structure loss and fire spread south of Platina Road.

Fire Spread

A total of 2,930 acres burned during the first operational period.

Saturday July 12th

| | Total Resources | Total Personnel |
|---------------|-----------------|-----------------|
| Engines | 40 | 120 |
| Hand Crews | 22 | 352 |
| Dozers | 14 | 28 |
| Water Tenders | 15 | 30 |
| Aircraft | 15 | 29 |
| Totals | 106 | 559 |



<u>Weather</u>

Very hot and dry under a high pressure ridge with general winds that were fairly light with some localized breezy up canyon winds on the fireline. Arbuckle basin just a couple miles from the fireline saw a transition to up canyon winds after sunrise with increasing speeds after the inversion lifted around noon. Up canyon winds were from the southeast 7 to 11 mph with gusts up to 20 mph. Maximum temperatures ranged from around 94 to 102 degrees with minimum relative humidity in the lower teens. There were fairly stable conditions in the afternoon with little in the way of cumulus or column development.

Narrative

The fire moved at a moderate rate of spread driven by extremely dry fuels and slope alignment with medium range spotting. At times the fire was plume-dominated due to very high energy release rates caused by dry fuels. IMT 6 (Estes) assumed command of the incident at 1800 hours.

Fire Spread

An additional 770 acres burned this operational period for a total of 3,700 acres.

Sunday July 13th

| | Total Resources | Total Personnel |
|---------------|-----------------|-----------------|
| Engines | 60 | 180 |
| Hand Crews | 29 | 464 |
| Dozers | 26 | 52 |
| Water Tenders | 16 | 32 |
| Aircraft | 17 | 32 |
| Totals | 148 | 760 |

Weather

Temperatures Sunday ranged from the upper 90s to 104. Minimum humidity dropped into the lower teens, although a weather system passing to the north kept RH values up somewhat during the middle part of the day. Ridge humidity dropped to around 10%. Winds were mainly light and terrain driven with west ridge top winds to 8 mph.

Narrative

The fire moved slowly through the heavy brush fuels on the surface in a northwesterly direction in Division F. There was widespread smoldering and creeping along the lines in many areas on the fire, as well as a few large islands of unburned brush canopy within the perimeter with smoldering fire behavior. Fire spread was primarily topographic and fuels driven.



When fuels, wind and topography came into alignment, the fire made hard runs up several drainages. Damage assessment was ongoing. Re-population occurred for all evacuated residences and the soft road closure was lifted for Platina Road.

Fire Spread

An additional 700 acres burned this operational period for a total of 4,400 acres.



Monday July14th

| | Total Resources | Total Personnel |
|---------------|-----------------|-----------------|
| Engines | 60 | 180 |
| Hand Crews | 32 | 512 |
| Dozers | 31 | 62 |
| Water Tenders | 17 | 34 |
| Aircraft | 18 | 36 |
| Totals | 158 | 824 |

Weather

Strong down canyon winds were reported during the early morning hours with poor humidity recovery conditions. There were reports from the Duncan Creek area during night operations of sustained winds from 20 to 30 mph. These winds dropped off after 0600 hours with a transition to up canyon winds by around 1200 hours. Maximum temperatures Monday topped 100 degrees in most areas ranging from 101 to 106 degrees. Minimum humidity dropped into the lower teens ranging from about 10-15%. Daytime winds were mainly light to 10 mph with gusts into the teens.



Narrative

The fire made sustained surface fuel runs through the heavy brush. Fire spread was topographic and fuels driven. Observed winds caused significant fire activity on the fire. When fuels, wind and topography came into alignment, the fire made hard runs up several drainages. There was continued widespread smoldering and creeping within the islands of unburned brush canopy and along the lines in many areas on the fire. Damage assessment was ongoing. Significant fire activity caused additional mandatory evacuations and threatened structures. Two reports were received by line personnel during this operational period of a missing person within the fire area.

Fire Spread

An additional 2,000 acres burned this operational period for a total of 6,400 acres.

Tuesday July 15th

| | Total Resources | Total Personnel |
|---------------|-----------------|-----------------|
| Engines | 65 | 195 |
| Hand Crews | 34 | 544 |
| Dozers | 50 | 100 |
| Water Tenders | 22 | 44 |
| Aircraft | 23 | 58 |
| Totals | 194 | 941 |

Weather

Monsoon moisture moved over the area brought high and mid clouds to the fire area most of Tuesday. Humidity saw increases of about 4 to 8 percent over the previous day. Temperatures were about 5 to 10 degrees cooler. Minimum RH Values were 17 to 22 percent with daytime highs about 92 to 97 degrees. Winds were mainly upslope to up canyon to 6 mph with some gusts to 11 mph in favored areas. A slight chance of a light shower or sprinkle existed through the nighttime hours.

Narrative

The fire made slope driven runs in brush and crept in the timber and understory. Increased humidity and cloud cover slowed the fire spread rates in the timber. The fire continued to grow during the day with active burning observed. Due to significant fire activity and growth outside of the planned control lines, mandatory evacuation orders remained in effect for the Big Foot Road and Sunny Hill Road area. Evacuation advisories were also issued further east to Rainbow Lake Road. Strategic firing operations were conducted in accordance with approved operational firing plans and successful.



Fire Spread

An additional 2,300 acres burned this operational period for a total of 8,700 acres.



Wednesday July 16th

| | Total Resources | Total Personnel |
|---------------|-----------------|-----------------|
| Engines | 70 | 210 |
| Hand Crews | 37 | 592 |
| Dozers | 46 | 92 |
| Water Tenders | 29 | 58 |
| Aircraft | 18 | 49 |
| Totals | 200 | 1,001 |

Weather

Winds transitioned to upslope by mid-morning at 3 to 5 mph with gusts to 10 mph. There were slightly higher wind speeds at Arbuckle basin (15 mph). Temperatures remained several degrees cooler today compared to the previous day while the RH remained about 5-10 percent higher throughout the afternoon. Variable high cloudiness moved across the region throughout the day. Maximum temperatures today were 90 to 96 degrees, with minimum RH values of 22 to 28%. An RH of 18% was reported at the Yolla Bolly RAWS during the late morning.



Narrative

The fire continued making slope driven runs in the brush and continued creeping in the timber understory. Increased humidity and cloud cover slowed spread rates in the timber. Fire continued to grow during the day with active burning observed. Burnout and tactical patrol operations continued to be utilized to further support existing control line throughout the operational period. Significant improvements were made to the control lines in Branch I and II. Mandatory evacuation orders were lifted and resident re-population began in the Sunny Hill Road area. Strategic firing operations were conducted in accordance with approved operational firing plans and successful. A single civilian fatality was discovered during this operational period. It was determined that the fatality occurred during the initial attack phase of the incident.

Fire Spread

An additional 2,000 acres burned this operational period for a total of 10,700 acres.

Thursday July 17th

| | Total Resources | Total Personnel |
|---------------|-----------------|-----------------|
| Engines | 75 | 225 |
| Hand Crews | 36 | 576 |
| Dozers | 38 | 76 |
| Water Tenders | 32 | 64 |
| Aircraft | 18 | 49 |
| Totals | 199 | 990 |

Weather

Monsoon moisture continued to feed into the area with a weak disturbance squeezing out a few light showers over Base Camp In the morning hours. No rain was reported on the fire. Skies cleared to mostly sunny by afternoon under slightly more stable conditions. Maximum temperatures reached the upper 80s to mid-90s. Minimum RH was 30 to 35%. Winds were primarily terrain driven turning from light down canyon in the morning to upslope and up canyon 3 to 9 mph after 0900 hours.

Narrative

The fire continued making slope driven runs in the brush and continued creeping in the timber understory. Fire continued to grow during the day with active burning observed. Burnout and tactical patrol operations continued to be utilized to further support existing control line throughout the operational period. Significant improvements continued to be made to the control lines in Branch III. Resident re-population was completed. Strategic firing operations were conducted in accordance with approved operational firing plans and successful.



Fire Spread

An additional 1,000 acres burned this operational period for a total of 11,700 acres.



Friday July 18th

| | Total Resources | Total Personnel |
|---------------|-----------------|-----------------|
| Engines | 61 | 183 |
| Hand Crews | 41 | 656 |
| Dozers | 36 | 72 |
| Water Tenders | 48 | 96 |
| Aircraft | 15 | 48 |
| Totals | 201 | 1,055 |

Weather

Fair skies with some scattered cumulus in the afternoon but no thunderstorm development. High temperatures were in the 90s. Minimum humidity was 25 to 32%. Upslope to up canyons winds developed mid-morning at 3-6 mph with gusts to 12 mph. Ridge winds were mainly southeast from 2 to 4 mph with gusts to 10 mph.



Narrative

The fire from the burning operation backed into the east fork of Duncan Creek with occasional isolated single tree scorching. Other areas of the fire continued creeping in the understory. The fire continued to grow during the day with active burning observed. Burnout and tactical patrol operations continued to be utilized to further support control lines throughout the operational period. Significant improvements were made to the control lines in Branch III.

Fire Spread

An additional 961 acres burned this operational period for a total of 12,661 acres.

Saturday July 19th

| | Total Resources | Total Personnel |
|---------------|-----------------|-----------------|
| Engines | 25 | 75 |
| Hand Crews | 24 | 384 |
| Dozers | 14 | 28 |
| Water Tenders | 33 | 66 |
| Aircraft | 12 | 42 |
| Totals | 108 | 595 |

Weather

Southwest flow aloft pushed the monsoonal moisture southward temporarily resulting in drier conditions today. There were sunny skies throughout the day. High temperatures were 95 to 100 degrees. Minimum RH was 18 to 25%. Upslope to up canyon winds developed mid-morning from 3-6 mph with gusts to 12 mph. Ridge winds were mainly southerly at 3 to 9 mph after about 0900 hours.

Narrative

The fire continued backing into the East Fork of Duncan Creek. Other areas of the fire continued creeping in the timber understory and consuming unburned islands, all well interior. Crews continued holding direct line, mopping up, and back hauling equipment and garbage from the fire area. Tactical patrol operations continued to be utilized to further support existing control lines throughout the operational period. Significant improvements continued to be made to the control lines in all Branches.

Fire Spread

None.



Sunday July 20th

| | Total Resources | Total Personnel |
|---------------|-----------------|-----------------|
| Engines | 31 | 93 |
| Hand Crews | 22 | 352 |
| Dozers | 13 | 26 |
| Water Tenders | 38 | 76 |
| Aircraft | 15 | 46 |
| Totals | 119 | 593 |

Weather

It was a little cooler today with higher humidity. Maximum temperatures were 90 to 95 degrees. Minimum humidity was 24 to 28%. There were slightly enhanced upslope to up canyon southeast flow with southerly aspects picking up southeast winds at 4-8 mph with gusts to 15 mph.

Monsoon moisture pushed northward over the area today bringing scattered clouds throughout the day. A thunderstorm formed within 5 miles of Division K/F west of the fireline around 1500 hours. Thunderstorms continued in this area through the remainder of the afternoon. Light downdraft winds were observed with some sprinkles on the line.

<u>Narrative</u>

The fire continued backing into the East Fork of Duncan Creek. Other areas of the fire continued creeping in the timber understory and consuming unburned islands, all well interior. One significant run in an unburned island prompted the use of fixed wing aircraft. Crews continued improving direct line, mopping up, and back hauling equipment and garbage from the fire area. Tactical patrol operations continued to be utilized to further support existing control lines throughout the operational period. Significant improvements continued to be made to the control lines in all Branches.

Fire Spread

None.

Monday July 21th

| | Total Resources | Total Personnel |
|---------------|-----------------|-----------------|
| Engines | 35 | 105 |
| Hand Crews | 23 | 368 |
| Dozers | 14 | 28 |
| Water Tenders | 34 | 34 |
| Aircraft | 6 | 14 |
| Totals | 112 | 549 |



Weather

There were partly to mostly cloudy with a threat of thunderstorms in the afternoon. Maximum temperature was 74 degrees with a minimum RH of 40%. Ridge winds were east 3-8 mph.

Narrative

The fire completed backing into the East Fork of Duncan Creek. Other areas of the fire continued creeping in the timber understory and consumed unburned islands well interior. Crews continued improving direct line, mopping up and back hauling fire hose and garbage from the fire area. Tactical patrol operations continued with improvements made to control lines in all Branches.

Fire Spread

None.

Tuesday July 22th

| | Total Resources | Total Personnel |
|---------------|-----------------|-----------------|
| Engines | 30 | 90 |
| Hand Crews | 19 | 304 |
| Dozers | 10 | 20 |
| Water Tenders | 28 | 28 |
| Aircraft | 3 | 12 |
| Totals | 90 | 454 |

Weather

High temperatures were 81-86 degrees. Minimum Relative Humidity was 27-32%. Winds were out of the southeast at 4-9 mph with ridge top winds at 8 mph. Monsoonal moisture remained in the area. Potential thunderstorms were reported over the fire area.

Narrative

Crews continued improving direct line, mopping up and back hauling fire hose and garbage from the fire area. Tactical patrol operations continued with improvements made to control lines in all Branches.

Fire Spread

None.





Air Operations Summary

Summary

The Team 6 Air Operations Branch Director was already assigned to incident during initial attack. Initial attack aircraft consisted of two Air Attacks, seven Air Tankers and five Helicopters.

Bully Helibase was established on July 12th at the Brashears Ranch located on Platina Rd. During the first days of the fire, rotor wing augmentation exceeded the capacity at Bully Helibase and Sky Helibase was established on July 15th. On July 17th, a portable retardant plant was established to support helicopter retardant application in areas not suitable for fixed wing aircraft.

At the peak of the incident there were three Air Attacks, seven Air Tankers and fifteen Helicopters assigned. Fixed wing aircraft supported the incident flying 194 hours and delivering 364,503 gallons of retardant for a cost of \$3.96 per gallon. Helicopters supported incident operations flying 484 hours delivering 835,113 gallons of water at a cost of \$1.83 per gallon.



Helicopters delivered 88,641 gallons of retardant, 36,195 pounds of external cargo, conducted IR, recon and mapping missions and transported a total of 173 personnel.

In addition, CAL FIRE helicopters performed four medical evacuations, including three hoist rescues. Due to the potential for serious injury and steep rugged terrain a night hoist rescue helicopter was assigned utilizing Orange County Copter 2 to facilitate 24 hour hoist rescue capability on the incident.

Successes

The local Unit had pre-identified Helibase locations. Assigned CAL FIRE and Orange County helicopters provided 24 hoist rescue capabilities. Agency and USFS exclusive use helicopters with crews minimized costs and eliminated the need for additional overhead. There was good availability of aviation assets and personnel and all aviation resource requests were filled. Availability of operational and IR Map data online was able to be utilized by aviation personnel.

Challenges

Required tracking of water usage at dip sites and lack of available dip sites for rotor wing use due to the drought caused some issues. Maintaining security at Sky Helibase was difficult. There was an initial lack of phone communications at the Bully Helibase on the Brashears Ranch property. This was later mitigated by using an OES Mobile Interoperability Gateway Unit.



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Fixed Wing Costs

| Date | Flight Hours | Flight Cost | Gallons | Misc |
|--------|--------------|----------------|---------|------|
| 7/11 | 26.7 | \$174,410.24 | 48,886 | |
| 7/12 | 29.09 | \$202,049.56 | 56,262 | |
| 7/13 | 29.41 | \$171,059.84 | 40,283 | |
| 7/14 | 44.6 | \$407,084.62 | 103,728 | |
| 7/15 | 49.91 | \$438,010.69 | 105,081 | |
| 7/16 | 1.44 | \$11,512.58 | 2997 | |
| 7/17 | 7 | \$19,627.69 | 4292 | |
| 7/18 | 1.38 | \$3480.78 | 1001 | |
| 7/19 | 0 | 0 | 0 | |
| 7/20 | 4.57 | \$16,867.97 | 1993 | |
| 7/21 | | | | |
| 7/22 | | | | |
| Totals | | \$1,444,103.97 | | |

Helicopter Costs

| Date | Flight Hours | Flight Cost | Gallons | Retardant |
|--------|--------------|----------------|---------|-----------|
| 7/11 | 18.6 | \$58,172.42 | 56,900 | |
| 7/12 | 32.9 | \$70,238.53 | 42,780 | |
| 7/13 | 54.1 | \$166,905.02 | 114,080 | |
| 7/14 | 58.6 | \$189,712.19 | 147,340 | |
| 7/15 | 75.8 | \$255,190.18 | 168,486 | |
| 7/16 | 57 | \$229,460.69 | 103,299 | |
| 7/17 | 43.1 | \$178,731.38 | 74,826 | 23,631 |
| 7/18 | 52.7 | \$221,158.30 | 84,533 | 65,010 |
| 7/19 | 25.5 | \$96,792.03 | 23,659 | |
| 7/20 | 38.4 | \$123,252.60 | 15,850 | |
| 7/21 | 17.4 | \$60,627.97 | 3360 | |
| 7/22 | | | | |
| Totals | | \$1,679,026.84 | | |



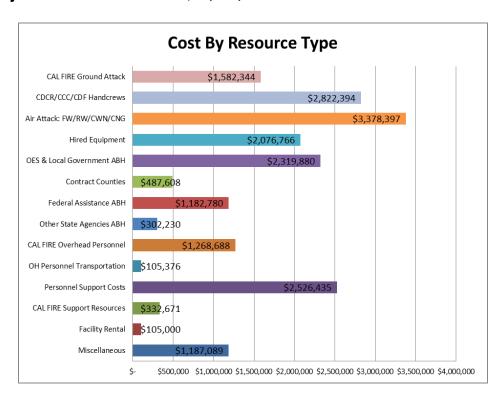
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Estimated Incident Costs

| Day | Date | Cost per Day | Cost to Date | Acres to Date | Cost per Acre |
|-----|-----------|----------------|-----------------|---------------|---------------|
| 1 | 7/11/2014 | \$397,131.00 | \$397,131.00 | 2800 | \$141.83 |
| 2 | 7/12/2014 | \$1,059,441.00 | \$1,456,572.00 | 3300 | \$441.39 |
| 3 | 7/13/2014 | \$1,845,204.00 | \$3,301,776.00 | 3700 | \$892.37 |
| 4 | 7/14/2014 | \$2,262,145.00 | \$5,563,921.00 | 4400 | \$1,264.53 |
| 5 | 7/15/2014 | \$2,675,843.00 | \$8,239,764.00 | 6400 | \$1,287.46 |
| 6 | 7/16/2014 | \$2,227,879.00 | \$10,467,643.00 | 8700 | \$1,203.18 |
| 7 | 7/17/2014 | \$2,412,255.00 | \$12,879,898.00 | 10700 | \$1,203.73 |
| 8 | 7/18/2014 | \$2,461,819.00 | \$15,341,717.00 | 11200 | \$1,369.80 |
| 9 | 7/19/2014 | \$2,183,499.00 | \$17,525,216.00 | 12661 | \$1,384.19 |
| 10 | 7/20/2014 | \$1,885,863.00 | \$19,411,079.00 | 12661 | \$1,533.14 |
| 11 | 7/21/2014 | \$1,557,008.00 | \$20,968,087.00 | 12661 | \$1,656.12 |
| 12 | 7/22/2014 | \$1,286,283.00 | \$22,254,370.00 | 12661 | \$1,757.71 |
| 13 | 7/23/2014 | \$1,169,916.00 | \$23,424,286.00 | 12661 | \$1,850.11 |
| 14 | 7/24/2014 | \$220,737.00 | \$23,645,023.00 | 12661 | \$1,867.55 |
| 15 | 7/25/2014 | \$220,737.00 | \$23,865,760.00 | 12661 | \$1,884.98 |
| 16 | 7/26/2014 | \$220,737.00 | \$24,086,497.00 | 12661 | \$1,902.42 |

Total Projected Incident Costs - \$24,086,497.00





COMMAND AND GENERAL STAFF

Safety Officer

The fire burned in steep rugged terrain and challenged fire personnel with limited access and both extreme fire behavior and weather conditions. The Safety Section supported the incident by providing line safety officers, conducting Base Camp and facility inspections and documenting the actions of the Safety Section.

This documentation included two Blue Sheets and one Green Sheet in response to two significant incidents. Incident hazards were identified with mitigations detailed in the daily Hazard and Risk Analysis ICS-215A. Identified hazards were the basis for both the daily Safety Message and ICS-204 special instructions in the IAP as well as the Safety portion of the Operational Briefing.

Safety Officer staffing included two Type 1 Safety Officers (SOF1), one SOF1 Trainee, six Type 2 Safety Officers (SOF2) and seven Line Safety Officers (SOFR). Additionally there were eleven line SOFR trainees, each assigned to qualified Safety Officers. Safety Section personnel were assigned to a multitude of incidents ranging from minor vehicle collisions to medical emergencies, including one civilian fatality.

Successes

Response to the extreme weather conditions included staged refrigerated supplies (hydration and nutrition) at Drop Points on the fire line, cooling station and rehabilitation facilities within Base Camp and establishing climate controlled areas to support the work to rest cycles for the California Conservation Crew members.

Due to the rugged terrain and limited access, the Safety Section prepared for extrication challenges by committing hoist capable air resources to the incident for both day and night operations. The incident did utilize helicopter hoist operations on three different occasions.

The Safety Section facilitated the training of eleven line safety officers with three trainees completing their task books on this incident.

<u>Challenges</u>

There were some inconsistencies with assigned field personnel following the injury reporting procedures as outlined in the Incident Medical Plan ICS-206. This created a ripple effect on communications, logistics and resources committed to these events. Efforts to educate personnel during Operational Briefings, as well as the distribution of pocket cards outlining the process, contributed to improved compliance during the incident with the ICS-206 process.



Orders were placed for Line Safety Officers early in the incident in anticipation of the impending challenges of the fire. The "fills" of these orders were slowly realized on the ever expanding incident. At one point all outstanding SOFR orders were abandoned and a new order was placed with more positive results.

Public Information Officer

Summary

Upon activation the IMT Information Officer (PIO 1) contacted the incident PIO to get an update on current conditions and media activity. The Team PIO was already working with the Unit PIO updating information on the CAL FIRE website, Facebook and Twitter accounts. Based on the status of the fire and information received from the incident PIO it was determined that the pre-established PIO resource orders were adequate.

The IMT PIO attended the Unit operational briefing and met face to face with the current incident PIO. Current status of established information activities was exchanged. Based on the good work of Unit personnel several key operations had already begun. Media inquiries were being handled by the initial incident PIO, a central public information phone number was in place and public notification had occurred. A fully staffed call center had been established at the Unit headquarters. The call center was staffed with Unit administrative office personnel.

The IMT PIO integrated with the Unit PIO, as well as up to 5 additional PIO's at the peak of the incident, forming the PIO team. An information shop was developed at incident base in a convenient location for members of the public and media to make quick and efficient contact. The information function was co-located with the Liaison shop, which was very beneficial throughout the incident as it relates to quick information exchange.

It is estimated that the call center processed nearly 900 calls during the duration of the incident.

Regular contact with the call center continued daily and has handled primarily by the Unit PIO. Incident updates and maps were provided to the call center daily. Significant updates to the call center staff were made as they occurred. Morning and evening incident update sheets and PIO fire perimeter maps were developed and distributed locally via the media and trap line. Sacramento Office of Communications was updated regularly for the purpose of updating the CAL FIRE incident information webpage, Facebook and Twitter accounts.



Members of the media were active both in the fire area and at incident base. Media phone and on-camera interviews were provided through the duration of the incident. Keep in mind this was a very complex incident involving a rapidly growing wildfire, multiple road closures, evacuations, re-populations, a civilian fatality and a criminal investigation/arrest related to marijuana cultivation.

Although the media market in the immediate area is relatively small as compared to other parts of California, this incident was covered statewide and nationally. It is estimated that the PIO team facilitated well over 50 in-depth media interviews/tours through the duration of the incident. Moreover, there were countless media calls related to quick incident updates and interview facilitation.

A trap line was established, which included six physical locations, evacuation centers and local hotel delivery via the Finance Section staff.

Contact with the fire and law liaisons, local law enforcement and public works department was maintained with regard to the notification of the public on road closures, evacuation orders and the re-population of the areas that had been evacuated. Road closure, evacuation and re-population media alerts were issued as necessary.

In addition to addressing local media and community information needs, the PIO shop facilitated three tours involving international media from Japan and Russia, as well as CAL FIRE Executive staff and members of the California State Department of Finance and the Legislative Analyst's Office. Tours of the incident base camp and various points of interest within the fire area were facilitated and supported.

One of the assigned PIO's was very technologically competent and had experience with Google Voice service. He was able to establish an IMT 6 account. This account can be used as a media line for future incidents, providing flexibility and options for expediting a media line for an incident anywhere in the state.

Successes

Unit personnel did an outstanding job establishing initial public information operations; including media management and placing fire information line and call center in place rapidly.

There were multiple activities facilitated by the PIO team, including special tours. The Logistics Section went above and beyond to support PIO needs in a rapid an efficient manner. LOGS support helped the tours go off successfully.



When a civilian fatality was discovered within the fire perimeter, the Team PIO staff assisted the SCSO and local Unit with the handling of a news release and public notification. This was very beneficial and minimized the overall impact of the event on the incident.

During the incident the PIO shop had four trainees. All were from the local Unit and Region. Three were PIOF trainees and one was a PIO2 trainee. The PIOF trainees completed their task books. The PIO2 trainee was able to complete additional required tasks as well.

Challenges

Although the communication with the call center was good, it would be beneficial for the call center staff to have access to a television in the room they are operating in. This would allow them to monitor local media reports and anticipate potential calls from the public.

The Unit PIO's laptop computer is antiquated. There were several occasions where it experienced technical difficulties which resulted in lost productivity during critical need time periods. Examples include, computer lock-up and unreliable Wi-Fi connectivity.

This is a critical tool a PIO must have to meet the information demands of the media and general public, especially on a large incident with the complexities such as this one.

Cell phone coverage was virtually non-existent in the fire area. This placed limits on PIO abilities to communicate with members of the media and our own team members in the field.

Liaison Officer

Summary

All IMT 6 Liaison Officers responded to the incident. The Team's Law Enforcement (LE) Liaison was the first to arrive in time to attend the 0700 briefing on July 12th. Liaison immediately began reaching out and establishing relationships with the incident cooperators with two LOFR's in attendance at the IMT transition meeting.

Incident priorities and objectives were established and sensitive and critical areas were identified, such as the commercial timber values of Sierra Pacific Industries and Crane Mills.



Mandatory evacuation orders were in place beginning the night of July 11th. The LE Liaison met with Shasta County Sheriff's Office (SCSO) representatives to ensure the evacuation area and road closures were valid. An Evacuation / Re-Population Plan was completed based upon the sheriff department's information.

The LOFR section continued gathering cooperating agencies' contact information so representatives could be invited to the next day's Operational Briefing and Cooperators' Meeting. Cooperators' meetings were held each morning at 1000 hours. The meetings continued until the incident was transitioned back to the local Unit.

At the peak of the incident, there were 39 agency and cooperator representatives included on the contact list.

LE Liaisons conducted various activities including helping to facilitate and document evacuations, road closures, and the repopulation of evacuated areas. They provided intelligence to the IC from local law enforcement sources, communicated with allied agencies and advised and answered questions IMT members related to legal statutes and LE protocols and procedures.

Successes

The implementation of the Law Enforcement Technical Specialist (LE Liaison) proved to be a tremendous asset. It is evident this new position is a positive addition to the Team and its' mission. The communication and coordination between the IMT, law enforcement agencies and cooperators were fluid and constructive. Because of past fires in the area, existing relationships proved to be of great value.

Because of the good relationships and trust established with the SCSO and the unavailability of other law enforcement resources in the area, Team 6 LE Liaisons were requested to assist with a missing persons report within the fire area.

There was a high degree of cooperation throughout the incident by Team LOFR members, Agency Representatives and cooperators. The positive attitude and professionalism of the Team was instrumental in the success of the team's activation.

Challenges

Liaison challenges included long distance travel drive times which hindered initial full LOFR engagement in the incident and citizens who did not evacuate as requested and/or wanted to re-enter the burn area before it was safe to do so.



This made it difficult for the Sheriff's Department to know exactly who and how many were evacuated. In addition, some areas where road closures were located posed a challenge for officers as they had to check identification and residence addresses during re-entry.

Operations Section Chief

Summary

From an operations standpoint, we were able to receive from the Unit a well-established command structure (2 Branches and 6 Divisions) that was heavily supported by local resources. The decision was made to add a third Branch as well as two additional Divisions due to the complexity of the incident.

For the first two operational periods that the Team had the fire, ground personnel experienced extreme fire behavior due to high temperatures, low humidity and fuel conditions. On the third operational period, with the presence of the incoming monsoonal moisture, we were able to make substantial headway with planned firing operations.

Due to the success of the planned firing operations over the following three operational periods, we were able to have our final acreage burned and transitioned into a holding position on the fire. With aggressive mop up by the field personnel, we were able to hold the fire to 12,661 acres.

While an aggressive suppression effort was going on in the field, a contingency plan was being developed and implemented by the Contingency Branch. This plan and process used to develop it proved to be very successful and will be used on future incidents for IMT 6.

In addition to the fire suppression efforts going on, we also had structure defense issues on the Old Bully Choop Road and Sunny Hill Road areas that required mandatory evacuations.

Successes

The Unit embedding local personnel into our command structure supported a smooth transition of incident operations to the Team. This allowed us to have the local knowledge in the field, as well involved in our contingency planning processes.

Through the coordination of the two Law Enforcement Liaisons assigned to the Team and the Shasta County Sheriff's Office, a successful evacuation plan was implemented quickly.



Containment was established in some very difficult country. Heavy fuels and steep terrain were challenges that were overcome by ground and air resources.

Development of a detailed contingency plan allowed us to get out ahead of the fire while still engaging in direct perimeter control. This was successful due to the availability of qualified personnel on the incident that could function in this support role.

<u>Challenges</u>

One of our major challenges was communications. Given the location of the fire, communications in this area proved to be a significant challenge.

Filling of operational overhead positions on the fireline (Division/Group Supervisors and Heavy Equipment Bosses) proved to be a challenge throughout the incident.

Due to drought conditions, we did not have a suitable water source close to the incident to support the water tenders. Water tender turn-around travel times in some cases were in excess of 3 hours.

Plans Section Chief

Summary

IMT 6 Plans personnel arrived during the overnight hours of Friday July 11th establishing Check-In and setting up the Plans Section at the Incident Base. The Team PSC1 facilitated the initial in-brief transition meeting for the local Unit and assumed responsibility for the Plans Section from the extended attack organization.

Starting with the July 12th Planning Meeting, all IMT meetings and briefings were conducted in a timely and effective manner. IAP production, clerical and IT services were established and effective. Communication with the SHU ECC Expanded Dispatch was established and maintained through the use of a CAL FIRE ECC Support Team.

A CAL FIRE InciNet Kit with Advisors and IT personnel arrived and were effectively deployed. Fully staffed Resource and Demobilization Units were established and maintained throughout the incident, providing complete resource accountability.

IMT 6 assumed and maintained responsibility for the ICS 209 starting at 1800 hours on July 12th. Both the Cobra Helicopter and NIROPS IR flights were effectively used. Both NICS support and Field Observers were used to validate fire perimeter information through the Situation Unit. High quality and timely GIS products were delivered as needed through the use of GISS and GIS vendor.



Both a Fire Behavior Analyst and Incident Meteorologist were assigned. A full Documentation Unit was established and maintained, as well as both the Training and Crew Technical Specialist functions. Due to assigning trainees, two Documentation Unit Leaders were fully qualified on this incident.

The Plans Section also completed the Damage Inspection and After Action Reports and facilitated the turn-back transition meeting on July 23, 2014.

Successes

The local Unit was able to produce an IAP and Operational and IAP maps for the second operational period and submitted the first ICS-209 before the Team's arrival. This set the Team Plans Section up for success and is greatly appreciated.

There was adequate staffing of Status Check-In recorders and DMOB positions within the first 24 hours of the incident. Although the six assigned Status Check-in Recorders had no experience in this position, with the early establishment of InciNet, its user friendliness and on the job training, this problem was quickly overcome.

The ICS-215 process was implemented through scheduled meetings between Operations, Logistics, Safety, and Resources. These meetings provided the opportunity to share information and provide input into the incident's operational and logistical needs.

Having four Resource Unit Leaders (2Q/2T) and three Demobilization Unit Leaders (2Q/1T) in the two units was very beneficial and resulted in both Units performing at a very high level.

Having two Crew Technical Specialists was crucial to effectively interacting with CDCR and supporting CAL FIRE Crews throughout the incident. The incident coordinated and supported a "full 24 hour" Driver's Log reset for all Fire Crew Captains.

InciNet Advisors worked with the Situation Unit at mirroring the new FAMWEB ICS-209 program with InciNet and making the InciNet ICS-204 more useable for producing Incident Action Plans.

Having representatives from the ECC Support Team in the Resource Unit and colocating with the Ordering Manager was very helpful. Both were close enough to answer questions resource issues quickly and efficiently.

The Situation Unit facilitated the first flown fire perimeter by 1030 hours on July 12th by the USFS Cobra Helicopter. Being able to get 3 IR perimeter flights each day assured the SIT Unit was projecting the most accurate acreage at all times.



The Box.com QR reader was well used during the incident. There were 2,997 downloads of the maps and 1,079 downloads of the IAP from the Team's Box account.

Challenges

The ECC Support Team was delayed getting to the incident which resulted in the supplemental Column "C" resource orders not being placed in a timely manner. Because of this, the Clerical Support Trailer did not get ordered until late in the second day which required the Section to go to SHU headquarters for copies.

The Resource Unit did not have ROSS reports easily accessible the first few operational periods. In addition, a communication error between ROSS and the Sacramento server led to InciNet's inability to download current ROSS data. This resulted in an increased workload and duplication of work.

Available InciNet hardware was exhausted within the first 72 hours of the incident. Recommend additional InciNet computers and associated hardware be added to the InciNet Kits. Once again, good internet band width took some time to stand up.

Although the location of the Resource Unit was ideal, spacious, and convenient to work in; not having a private area to construct the ICS-204 made it difficult due to the amount of distractions present in the evening. This delayed IAP production.

Although personnel were highly successful once at scene, there were delays in getting both Documentation Unit Leaders and Crew Technical Specialists fills due to initial UTF. Once again, name requests were required.

SIT Unit challenges included Branches and Division Supervisors not bringing in map data before going off shift, ICS points not getting approved before being put on maps and FOBS being directed by Operations versus the SITL. If FOBS are needed for Operations, Line Scouts should be requested for this need. Also, current InciNet resource numbers do not match the new FAMWEB ICS-209.

Lastly, consideration should be given to establishing a CAL FIRE standard incident documentation package labeling standard as the federal labels in the Cache provided Doc Box system always has to be modified to meet Department needs.



Logistics Section Chief

Summary

The incident base was established at the Shasta District Fairgrounds. The fairgrounds staff was available and helpful regarding access to the facility. The complexity of the incident and the rapid growth of the incident provided for multiple challenges. The Logistic Section was able to provide support for approximately 2500 personnel assigned to the incident at three separate locations (ICP, Bully Helibase and Sky Helibase), two staging areas and multiple drop points. The Shasta Trinity Unit played an important role in the logistics sections success, with the early initial set-up and continued support through the duration of the incident.

Successes

The Shasta District Fairgrounds have once again proven to be an adequate location to support a rapidly escalating incident. The Fairground's size allowed the Team to increase the foot print of the Base Camp in a short amount of time. We were able to support over 2,500 people on site and accommodate the support of multiple resources including 69 Hand Crews.

A Food Unit (FDU) from High Rock camp was brought in to supplement the Mobile Kitchen Unit (MKU). Use of this FDU ensured that resources coming into Base later in the day and into early afternoon were provided a hot meal and the schedule for closing down the MKU to be cleaned and to convert over to prepare dinner was not interrupted.

Having North Ops close assisted in receiving additional radios and repeater orders to the Base in a very short amount of time. This allowed continuous distribution of HT radios and the quick installation of repeaters for line communication. Prior to the arrival of the Team, the Shasta Trinity Unit had a difficult time with communication between the fire and the ECC. Overcoming the communication difficulties was accomplished by utilization of two CAL FIRE mobile repeaters.

The Team was able to easily support the incident's supply needs due to the close proximity of the North Zone Cache to the incident. The North Zone Cache was extremely accommodating to the incident's needs. Incidents in other areas of the State normally receive supplies from the Cache one time a day. Multiple times throughout this incident we received 3 to 4 orders per day. The Cache went to great lengths to support the incident with multiple pumps and folding tanks. The incident used every pump the North Zone Cache had in stock. They also had pumps trucked in from Oregon and Colorado.



The Motel Unit was able to provide accommodations for State, Federal and local resources assigned to the incident in both Redding and Anderson. This was a huge task for an incident that was very dynamic. This allowed for short travel times to motels which enhanced personnel rest cycles. There was only one day that the incident had to send personnel to Red Bluff. The local vendors provided a great deal of support.

Challenges

IMT 6 was activated at approximately 2200 hours on Friday 7/11. The ECC Support Team was instructed to have an arrival time of 0600 on Saturday 7/12. The delay in the arrival of the ECC Support Team resulted in a delay in the Column "C" resource orders being put into ROSS as the Shasta Trinity Unit had only two people working in expanded dispatch through the night of 7/11 working on ordering the day shift resources for 7/12. If the ECCST would have arrived prior to 0600 on 7/12 they would have been able to provide some relief for the local Unit personnel and ensure the Column "C" list was placed into ROSS earlier.

Multiple VPN users online simultaneously resulted in internet connections that were slow and almost inoperable. The local internet company that provided service to the fairgrounds was contacted to turn up the band width to accommodate the amount of internet users. It took two days for a technician to arrive at base camp to complete the work order. Cell and internet connectivity was nonexistent at the Bully Helibase. After multiple failed attempts to provide conventional communication to the Helibase an OES communication support unit was used to provide a satellite feed to the Helibase.

The order for the Mobile Communications Unit (MCC) was placed in ROSS at the time of the Team activation. Although the Communications Unit was available at the local Unit, SHU was unable to immediately staff it with qualified personnel. Many initial arriving personnel on 7/12 needed their radios to be cloned in order to report to their line assignment. The COML was unable to facilitate all cloning requests the morning of 7/12 due to the lack of MCC equipment needed to program radios. The MCC subsequently arrived late in the afternoon of 7/12.

There were multiple challenges with hired equipment. Multiple vendors required support from the Supply Unit. Over 25 loaner radios were issued. Multiple EERA's were written incorrectly in the Units with invalid dates on EERA, old rates, incorrect equipment with incorrect rates etc.



Finance Section Chief

Summary

All personnel assigned to the Finance Section for Incident Management Team 6 were available for assignment (no substitutions) which allowed for team cohesion and establishing standards for future incidents. The complexity and duration of the incident allowed for the Finance Section to be established prior to any demobilization occurring. A good line of communication and working relationships were established early on with the other Sections. This allowed us to address issues promptly, organize, adjust accordingly and answer questions.

Successes

The Time Unit was fully staffed early, allowing us to catch up with the incident hired equipment faster than normal. Also having federal employees within the Finance Section allowed us to facilitate federal employee's needs by providing Crew Time Reports, posting to Federal Time Reports, completing I-suite cost reports, and being available for worker's compensation issues. The local Unit provided a representative to assist with paying the local government resources and was available to collect equipment documentation and process for payment.

Finance components in the Incident Action Plan reduced the amount of incorrect shift tickets being turned into the Time Unit. Also, an eFC-33 input worksheet allowed for employees to complete time sheet information while on the fire line and a "Water Usage Form" permitted us to identify and prevent any water issues early on in the incident.

The Finance Section had numerous priority trainees and requested trainees including three Purchasing Technical Specialists (PURC), one Payment Processing Technical Specialist (PPTS), one Compensation/Claims Unit Leader (COMP), two Equipment Time Recorders (EQTR) and two Personnel Time Recorders (PTRC). The trainees were very successful and filled the void in those positions that expanded dispatch was unable to fill with "qualified" personnel.

Once the Finance Section was able to get additional computers, we were able to set up an Injury Assessment Prevention System (IAPS) and ePay Café. This assisted COMP/CLAIMS with required injury reporting and allowed BU8 employees to complete their timesheets prior to the end of the Work Period for their home Unit.



Challenges

There was a significant amount of unable to fills in the Finance Section which caused some difficulty. Finance resource requests remained unfilled for days, even when updated daily and "trainees accepted" were approved for positions. The three positions affected were COMP, PURC, and PROC. It is recommended that these positions remain on the priority trainee lists for all Teams throughout the summer until we have adequate personnel to fill these positions. After the initial fills, the only supplemental positions filled in the Finance Section were those done by name request.

The Finance Section requires computers, printers, a fax/copier and a shredder etc. to be successful. The InciNet kit provided to the incident did not fulfill the needs required to function at the Type 1 IMT level. Section personnel had to provide their own printers and/or scanners to function efficiently. A fax line was eventually provided but a fax machine was not available.

Reliable internet connections were intermittent throughout the first several days of the incident. Personnel Time Recorders require internet to complete eFC-33 and Equipment Time Recorders need internet to validate contract rates and vendor information. Internet improves communication with vendors and department personnel at their home locations, in order to effectively provide internal and external customer services.

The Hired Equipment Management System (HEMS) is an antiquated program that needs updating to today's technology. The HEMS program did not in all cases transfer pertinent information onto the printed agreements. Examples of this were missing "wheel numbers" on Transports which dictate pay, the "not available rate" for Transports were incorrect as well missing company address and information, etc.

These errors stem in part from the HEMS program and in part from the Unit Hired Equipment Coordinators not verifying their agreements for accuracy. Vendors are then arriving at the incident and finding that they are ether being under paid or over paid. The Time Unit had to re-write 20 agreements.

The "Water Usage Forms" are an excellent idea to track incident water usage during the drought. However, water source locations were not clearly named and/or identified on operational maps to ensure consistency on the water usage form. The importance of this is underscored by the fact that total water usage by water tenders on this incident was 2,232,874 gallons. Tracking allowed the local water purveyor to access additional water allotments at no cost to the incident.



Trainees

The following Position Level Breakdown report identifies the number of trainees pursuing qualification by position complexity and functional area.

| Position Level | Command | Operations | Planning | Logistics | Finance | Air Ops | Dispatch | Total |
|----------------|---------|------------|----------|-----------|---------|------------|----------|-------|
| 500 | 5 | | | | | | | 5 |
| 400 | 19 | 11 | 3 | 3 | 1 | 1 | | 38 |
| 300 | | 9 | 13 | 10 | 1 | 1 | 1 | 35 |
| 200 | | 13 | 3 | 8 | 7 | 3 | 1 | 35 |
| 100 | | | | | | 1 | | 1 |
| Total | 24 | 33 | 19 | 21 | 9 | 6 | 2 | 114 |

Incident Commander Comments

Incident Management Team 6 (Estes) was activated and participated in the IMT conference call at 2300 hours on Friday July 11th. The Shasta Unit established an Incident Base at the Shasta District Fairgrounds in Anderson, CA. A majority of the team arrived prior to the Unit's Operational Briefing at 0700 hours. The Unit hosted and the Team facilitated a transitional briefing at 1000 hours with a full transfer of command to IMT 6 at 1800 hours on Saturday July 12th.

The Team quickly started supporting the incident with logistical, operational, and planning support. The fire continued to grow to the north and the weather produced extreme temperatures, reaching 114 degrees on the fire line. These extreme weather conditions presented challenges to the team both logistically and operationally.

The local Unit Chief provided the Team with a Delegation of Authority and clear written expectations. Several of the Management Objectives were provided within the written expectations document. The fire continued to progress towards commercial timberlands.

The strong relationship with local cooperators and allied agencies provided a strong base for IMT 6 to work from.

Successes

IMT 6 quickly assembled and embedded within the Unit organization which set the team up for success in the next operational period.

The Shasta County Sheriff's Department responded early in the incident and coordinated the evacuation of residences along Patina Road. IMT 6 Law Enforcement Liaison Officers quickly embedded with the Sheriff's Department and assisted with the



coordination of additional evacuations and road closures. SCSO worked in unison with IMT 6 Public Information Officers to ensure a seamless release of information.

The Shasta Trinity Unit had predetermined contacts for the commercial timber operators and allied agencies. Representatives from Sierra Pacific Industries and Crane Mills were on hand to open gates and provide local knowledge of the road system, water sources and past fire history.

Quick rescue response was provided to the fire line by agency aircraft. CAL FIRE Copter 205 performed three separate hoist rescues of injured firefighters on the line. These injured personnel were packaged and hoisted off of the fire line and transported to hospitals within 40 minutes of the initial notification of each emergency. Without this vital capability it likely would have taken 2-3 hours for each of the victims to be extricated from the line via traditional ground resources.

<u>Challenges</u>

The extreme weather conditions, including temperatures up to 114 degrees and rugged terrain coupled with record dry fuels, limited production rates and dictated additional logistical support to the fire line. The extreme weather conditions and rugged terrain also contributed to a higher than average injury rate.

The reported injuries included chainsaw incidents, vehicle accidents, and one individual struck by a fire weekend tree. These injuries involved CAL FIRE, USFS and private vendor personnel. Each of these incidents were investigated and properly documented.

Shasta Trinity Unit working with IMT 6 personnel produced two Blue Sheets and one Green Sheet. Injuries to USFS personnel required several conference calls between the two agencies to ensure the accident investigation and documentation met the needs of both agencies.

There were unfilled resource requests. Key overhead requests took several days to fill. At its peak, the incident supported 72 fire crews without a Crew Technical Specialist. It took two operational periods before critically needed Branch Directors and Division Supervisor requests were filled. The delayed response in acquiring qualified fire line leadership positions proved challenging and resulted in span of control issues. Eight Division Supervisor Qualified ROSS requests had to be downgraded to "Trainee" in order to be filled.