

FORK COMPLEX

Incident Action Plan

Sept. 12-14, 2015

0700 - 1900

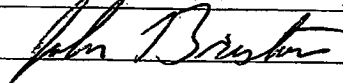
Maintain your Situational Awareness

- ✓ Do a through Risk Analysis BEFORE you engage in any action
- ✓ Wear Seatbelts /Lights On
- ✓ Keep speeds low in town
- ✓ Be ready for an Initial Attack
- ✓ These fires are down, but not out

Every Firefighter is owed a round trip home

CA-SHF-002067

SHASTA-TRINITY NATIONAL FOREST

INCIDENT OBJECTIVES		1. Incident Name		2. Date Prepared		3. Time Prepared	
ICS 202		Fork Complex		09/11/2015		1600	
4. Operational Period							
September 12-14, 2015				DAY OPERATIONAL PERIOD		0700-1900	
5. General Control Objectives for the Incident (include alternatives)							
<p>Operational Objectives:</p> <ol style="list-style-type: none"> 1. Keep the fires in the Fork Complex within existing containment lines while minimizing impacts to natural and cultural resources. 2. Implement fire suppression damage repair in accordance with the approved plan. 3. Emphasize operational safety through implementation of the Risk Management Process. 4. Provide Initial Attack for: <ol style="list-style-type: none"> a. Fire areas within the Complex and b. The area on the South Fork Management Unit <ol style="list-style-type: none"> i. South of Highway 3 ii. East of Tule Creek and Trinity Pines iii. North of Highway 36. 							
6. General Weather							
See attached forecast.							
7. General Safety Message							
Be prepared for Initial Attack as the weather warms and dries.							
8. Attachments							
x	Organization List-ICS 203	x	Air Ops Plan ICS-220	x	Fire Weather Forecast		
x	Division Assignment List-ICS 204	x	Incident Map	x	Fire Behavior Forecast		
x	Communications Plan-ICS 205	x	Transportation Maps	x	Water Log / Equipment Log		
x	Medical Plan-ICS 206	x	Safety Messages				
9. Prepared by (Planning Section Chief)				10. Approved by (Incident Commander)			
Alan Taylor							

ORGANIZATION ASSIGNMENT LIST		9. Operations Section		
1. Incident Name Fork Complex		Day Ops Chief		
		Night Ops Chief		
2. Date 9/11/2015		3. Time 1600 Hours		Planning Ops
		a. Division/Groups		
4. Operational Period 9/12-14/2015 DAY		0700 – 1900 Hours		Branch
Position		Name		Division
				Division
5. Incident Commander and Command Staff		Division		
Incident Commander	John Bristow, Robert Reeves (t)		Division	
Deputy IC				
Liaison				
Safety Officer				
Information Officer				
6. Agency Representative		b. Division/Group		
Agency	Name		Group	Roads Chad Lawson
Agency Admin	Tom Hall		Group	Patrol Keith Rohrs
Shasta NF Duty Chief	Ben Newburn		Group	Repair Daniel Smith
CAL FIRE Arep	Nick Truax			
Lead Resource Advisor			c.	
Trinity County Sheriff	Mike Rist			
SPI	Tom Walz			
CCC	Steve Donnelly			
			d.	
			e.	
7. Planning Section		f. Air Operations Branch		
Chief			Air Operations Branch Director	
Resources Unit			Air Support Group Supervisor	
Situation Unit			Air Tactical Group Supervisor	
Demob/Documentation Unit			Helibase Manager	
FBAN / LTAN				
SOPL				
Incident Meteorologist			10. Finance Section	
Training Specialist			Chief	Heather Archibald
GISS	Jim Gonzalez		Time Unit	
CTSP			Cost Unit	
			Comp/Claims Unit	
8. Logistics Section		Procurement Unit Leader		
Chief	Gonzalo Ochoa - BCMG		IBA	
Supply Unit				
Facilities Unit			Prepared By: Alan Taylor , RESL (t)	
Ground Support Unit				
Communications Unit	Chris Reynolds, Mike Flynn, Tym Sauter			
Medical Unit				
Food Unit				
Security Manager				

Division/Group Assignment List (ICS 204 WF)

1. Incident Name		3.				
FORK COMPLEX		Branch:		Division/Group:		
2. Operational Period:		DAY				
Date/Time From: 09/12/2015 0700 SAT		Date/Time To: 09/14/2015 1900 MON				
		PATROL				
4. Operations Personnel						
INCIDENT COMMANDER		JOHN BRISTOW ROBERT REEVES (T)		PLANNING OPERATIONS		
DIVISION/GROUP SUPERVISOR		KEITH ROHRS				
5. Resources Assigned this Period						
Strike Team / Task Force / Resource Designator		LWD	Leader	Number Persons	Drop Off PT./Time	Pick Up PT./Time
ENG3 SHF ENGINE-371 E-336 SOUTH		09/12	KEVIN MOGLIA	5	ICP/0700	ICP/1900
ENG6 PAULTON 671 E-496		09/19	BILL PAULTON	3	ICP/0700	ICP/1900
ENG6 PAULTON 8 E-497		09/21	TRAVIS PAULTON	3	ICP/0700	ICP/1900
FIRESTORM C-150		09/25		20	ICP/0700	ICP/1900
6. Control Operations/Work Assignments:						
Patrol and mop up areas of heat where safe and necessary to do so.						
7. Special Instructions:						
<ul style="list-style-type: none"> • Wilderness boundary is marked with blue/yellow flagging. • Repairs are to be consistent with the Fork Complex Fire Suppression Repair Plan, August 17, 2015 <p>Sensitive areas are marked with yellow/black striped flagging. Minimize ground disturbing activities in the area, if you're not sure, ask.</p>						
8. Division/Group Communication Summary						
Function	Channel	RX Frequency N/W	RX Tone/NAC	TX Frequency N/W	TX Tone/NAC	Mode
COMMAND NIFC 32	3	164.7750 N	162.2	170.0500 N	162.2	A
TACTICAL NIFC T5	6	166.7250 N	162.2	166.7250 N	162.2	A
AIR TO GROUND (AG08)	13	166.8750 N		166.8750 N		
9. Prepared By (Resource Unit Leader)			Approved By (Planning Section Chief)		Date	Time
ALAN TAYLOR			WALTER HERZOG		09/11/2015	2000

Division/Group Assignment List (ICS 204 WF)

1. Incident Name			3.			
FORK COMPLEX			Branch:		Division/Group: REPAIR	
2. Operational Period:			DAY			
Date/Time From: 09/12/2015 0700 SAT		Date/Time To: 09/14/2015 1900 MON				
4. Operations Personnel						
INCIDENT COMMANDER		JOHN BRISTOW ROBERT REEVES (T)		PLANNING OPERATIONS		
GROUP SUPERVISOR		DANIEL SMITH				
5. Resources Assigned this Period						
Strike Team / Task Force / Resource Designator		LWD	Leader	Number Persons	Drop Off PT./Time	Pick Up PT./Time
ENG3 BOULDER FD E-491		09/12	JAMES CARPENTER	4	ICP/0700	ICP/1900
DOZ2 SHF DOZ29 E-399		09/19	DAVE BROWN	1	ICP/0700	ICP/1900
EXCA SPYDER E-554		09/15	CASEY CARLSON	1	ICP/0700	ICP/1900
FALM NORTH ZONE FALLERS O-793 SOUTH		09/17	CARL HALL, GARY RILEY	2	ICP/0700	ICP/1900
THSP O-409		09/16	JOSH SMITH	1	ICP/0700	ICP/1900
6. Control Operations/Work Assignments:						
Continue suppression repair and coordinate with IC(t) on work assignments. Patrol and mop up areas of heat where safe and necessary to do so.						
7. Special Instructions:						
<ul style="list-style-type: none"> • Wilderness boundary is marked with blue/yellow flagging. • Repairs are to be consistent with the Fork Complex Fire Suppression Repair Plan, August 17, 2015 Sensitive areas are marked with yellow/black striped flagging. Minimize ground disturbing activities in the area, if you're not sure, ask.						
8. Division/Group Communication Summary						
Function	Channel	RX Frequency N/W	RX Tone/NAC	TX Frequency N/W	TX Tone/NAC	Mode
COMMAND NIFC C-32	3	164.7750 N	162.2	170.0500 N	162.2	A
TACTICAL R5 TAG4	7	166.5500 N	162.2	166.5500 N	162.2	A
AIR TO GROUND (AG08)	13	166.8750 N		166.8750 N		
9. Prepared By (Resource Unit Leader)			Approved By (Planning Section Chief)		Date	Time
ALAN TAYLOR			WALTER HERZOG		09/11/2015	2000

Division/Group Assignment List (ICS 204 WF)

1. Incident Name:		3				
FORK COMPLEX		Branch:		Division/Group:		
2. Operational Period:		DAY		ROADS		
Date/Time From: 09/12/2015 0700 SAT		Date/Time To: 09/14/2015 1900 MON				
4. Operations Personnel:						
INCIDENT COMMANDER	JOHN BRISTOW ROBERT REEVES (T)		ROADS GROUP		CHAD LAWSON	
PLANNING OPERATIONS						
5. Resources Assigned this Period:						
Strike Team / Task Force / Resource Designator	LWD	Leader	Number Persons	Drop Off PT./Time	Pick Up PT./Time	
WT2 NORTH STATE E-133	09/19	RANDY HERMAN	2	ICP/0700	ICP/1900	
WT2 PRO-DUMP E-238	09/29	MATTHEW CARROL	1	ICP/0700	ICP/1900	
WT2 KILLINGBECK E-519	09/14	MERLE KILLENBECK	1	ICP/0700	ICP/1900	
WT2 GET WET ENTERPRISES E-520	09/13	TYLER MINTO	1	ICP/0700	ICP/1900	
WT2 PARTRIDGE E-521	09/13	CHEQUITA PEACOCK	1	ICP/0700	ICP/1900	
GRDR OILAR AG E-435	09/23	NICK OILAR	2	ICP/0700	ICP/1900	
6. Control Operations/Work Assignments:						
Coordinate with Patrol and Repair Group Supervisors on work assignments.						
7. Special Instructions:						
8. Division/Group Communication Summary:						
Function	Channel	RX Frequency N/W	RX Tone/NAC	TX Frequency N/W	TX Tone/NAC	Mode
COMMAND NIEG C32	3	164.7750 N	162.2	164.7750 N	162.2	A
TACTICAL NIEG T1	5	168.0500 N	162.2	168.0500 N	162.2	A
AIR TO GROUND (AG08)	14	166.8750 N		166.8750 N		
9. Prepared By (Resource Unit Leader)		Approved By (Planning Section Chief)		Date	Time	
ALAN TAYLOR		WALTER HERZOG		09/11/2015	2000	

FORECAST:

IF CONDITIONS BECOME UNREPRESENTATIVE,
CONTACT THE NATIONAL WEATHER SERVICE.

SPOT FORECAST FOR FORK COMPLEX...USFS SHASTA-TRINITY
NATIONAL WEATHER SERVICE EUREKA CA
1059 AM PDT FRI SEP 11 2015

FORECAST IS BASED ON REQUEST TIME OF 0748 PDT ON SEPTEMBER 11.
IF CONDITIONS BECOME UNREPRESENTATIVE...CONTACT THE NATIONAL WEATHER
SERVICE.

.DISCUSSION...DRY AND HOT WEATHER WILL CONTINUE FOR THE FORK
COMPLEX TODAY AS HIGH PRESSURE ALOFT DOMINATES THE WEATHER PATTERN.
AN APPROACHING SHORTWAVE WILL BRING A RETURN OF NEAR NORMAL
TEMPERATURES AND IMPROVING RH RECOVERIES THIS WEEKEND THROUGH
EARLY NEXT WEEK. THERE IS A SLIGHT CHANCE OF DRY THUNDERSTORMS THIS
WEEKEND OVER INTERIOR MOUNTAINS WITH GUSTY RIDGETOP WINDS.

.TODAY...

SKY/WEATHER.....SUNNY.
MAX TEMPERATURE.....96-104.
MIN HUMIDITY.....9-15 PERCENT.
WIND (20 FT).....SOUTHEAST 2 TO 5 MPH.
 BECOMING TERRAIN DRIVEN 5 TO 9 MPH
 IN THE AFTERNOON WITH GUSTS UP TO 10 MPH.
EYE LEVEL WINDS.....SOUTHEAST 2 TO 5 MPH.
 BECOMING TERRAIN DRIVEN 4 TO 7 MPH IN
 THE AFTERNOON.
LAL.....1.
CWR.....0 PERCENT.

.TONIGHT...

SKY/WEATHER.....PARTLY CLOUDY.
MIN TEMPERATURE.....49-57.
MAX HUMIDITY.....60-75 PERCENT VALLEY.
 30-40 PERCENT MIDSLOPE AND RIDGETOP.
WIND (20 FT).....WEST WINDS 5 TO 7 MPH IN THE EVENING.
 BECOMING SOUTHEAST 2 TO 4 MPH OVERNIGHT.
EYE LEVEL WINDS.....WEST WINDS 4 TO 6 MPH IN THE EVENING.
 BECOMING SOUTHEAST 2 TO 4 MPH OVERNIGHT.
LAL.....1.
CWR.....0 PERCENT.

.SATURDAY...

SKY/WEATHER.....PARTLY CLOUDY THEN BECOMING MOSTLY CLOUDY.
MAX TEMPERATURE.....95-103.
MIN HUMIDITY.....12-15 PERCENT.
WIND (20 FT).....VARIABLE 2 TO 5 MPH.
EYE LEVEL WINDS.....VARIABLE 2 TO 5 MPH.
LAL.....1.
CWR.....0 PERCENT.

FIRE BEHAVIOR FORECAST

FORECAST NUMBER: 67-69	TYPE OF FIRE: Wildland Fire
FIRE NAME: Fork Complex	OPERATIONAL PERIOD: 9/12-14, 0700 to 1900
DATE ISSUED: 9/11/15	TIME ISSUED: 2000
UNIT: Shasta Trinity National Forest	SIGNED: /s/ John Wood FBAN

INPUTS

WEATHER SUMMARY: Dry and hot weather will continue at the South Complex through Friday as high pressure will dominate the weather pattern. Weak easterly flow will diminish tonight although relative humidity recoveries across mid slopes and ridgetops will likely be poor again. A pattern change will bring a return to normal temperatures with improving relative humidity recovery over the weekend and into early next week.

Expect maximum temperatures 96-104 Minimum humidity, 9-15%. 20 foot winds: Ridges southeast 2-5 in the morning becoming terrain driven 5-9 mph with gusts up to 10 mph in the afternoon. Valleys: southeast 2-5 mph; becoming terrain driven 4-7 mph in the afternoon.

OUTPUTS

GENERAL: Saturday will be the last day that is likely to reach the high fire behavior potential conditions as the east winds will subside and potential fire behavior will lower to moderate after the weekend. Conditions will make a rapid transition back to normal by Monday and the potential for precipitation enters the forecast by Wednesday. Although probability of ignition will drop off as conditions moderate, late in the afternoon at the peak heat will be the best chance for spotting as the probability of ignition is up around 80-90%. For fire behavior to reach the upper end of the forecast it will need wind and slope alignment. Other than at the peak conditions expect fire behavior at about half of the upper forecast values if there were fire spreading in unburned fuels. Fuels are at late season levels, 1000 hour fuels are around 12 percent and live fuels are near 90 percent leading to the potential for active fire spread. Within the perimeter of the fires in the complex the probability of ignition is high but spotting is not likely as the majority of fuels within the perimeter have been consumed and the fire has seen a mild wind test and an unseasonable heat test with little activity experienced. If thunderstorms do develop be aware of the potential for outflow winds to cause erratic fire behavior and greatly increase fire activity. Precipitation will reduce expected fire behavior.

Backing/Flanking rate of spread up to 2 ch/hr, flame lengths 1-3 feet.

Head fire:

Timber understory rate of spread 3-13 ch/hr, flame lengths 4-9 feet

Timber litter rate of spread up to 4 ch/hr, flame lengths around 2 feet

Shrub fuels rates of spread up to 29 ch/hr, flame lengths 6-7 feet.

SPECIFIC:

Fine fuel moisture 3-7% 1000 hr 12% Probability of ignition 60-90% Spot distance about 3 tenths of a mile.

All Divisions: Smokes will continue to show as the heat and humidity permit modest areas of heat to develop in available fuels. Conditions will not moderate enough over the three day period to extinguish smoldering heavies or the heat sources that remain within the perimeter of the fires in the complex. Winds may increase the chance of smokes showing up or island consuming as activity developed from the hot dry conditions.

Initial Attack: New starts or spots occurring in unburned fuels will likely reach moderate fire behavior. Initiating fires will show active fire spread as fuels in late season conditions will burn with intensity. Spotting will be a concern even as probability of ignition decreases to around 80% on Monday especially in short range spotting in leaf litter and grass. Fire brands are likely as torching occurs some group torching will be possible. Nighttime conditions will effectively moderate fire behavior. Lightning ignition efficiency is likely to be good as fuels remain dry following the heat wave.

AIR OPERATIONS

Smoke should not impact air operations.

Safety Message

Transition day: Ensure the plan is known and understood by all resources. Brief others as needed, Debrief your actions, Communicate hazards to others, Acknowledge messages and Ask if you don't know.

ICS 205 INCIDENT RADIO COMMUNICATIONS PLAN		Incident Name Fork Complex		Date & Time Prepared 9/11/15 1800		Operational Period Date/Time 9/12/15 - 9/14/15 0700 - 2200			
Ch #	Function	Channel Name/Trunked Radio System Talkgroup	Assignment	RX Freq N or W	RX Tone/NAC	TX Freq N or W	Tx Tone/NAC	Mode A, D or M	Remarks
Only frequencies listed on this 205 are authorized for use on this incident. Hand programmers accept all responsibility for the use of unauthorized frequencies.									
1	Command	NIFC C-4	All Divisions	166.6125 N	162.2	168.4000 N	162.2	A	Plummer Peak
2	Command	NIFC C11	All Divisions	170.6875 N	162.2	166.5750 N	162.2	A	Hayfork Bally
3	Command	NIFC C32	All Divisions	164.7750 N	162.2	170.0500 N	162.2	A	Knob Peak
4	District	HAYFORK	District	170.4875 N		170.4875 N	T7,167.9	A	Hayfork District Net
5	Tactical	NIFC T1	Roads	168.0500 N	162.2	168.0500 N	162.2	A	
6	Tactical	NIFC T5	Patrol	166.7250 N	162.2	166.7250 N	162.2	A	
7	Tactical	R5 TAC4	Repair	166.5500 N	162.2	166.5500 N	162.2	A	
8	SERV RPT Hay B	SERV HB	All Divisions	164.1250 N		164.8250 N	T4,136.5	A	Hayfork Bally Service Net
9	SHF Hayfork Bally	SHF BALLY	I/A	171.5750 N		169.1000 N	136.5	A	
10	SHF Plumber Peak	SHF RPT	I/A	171.5750 N		169.1000 N	114.8	A	
11	Tactical	NIFC T2	I/A	168.2000 N		168.2000 N		A	
12	Tactical	NIFC T3	I/A	168.6000 N		168.6000 N		A	
13	Air to Ground	A/G 08	All Divisions	166.8750 N		166.8750 N		A	Fork Complex A/G / Secondary IA A/G
14	Air to Ground	A/G 43	I/A	167.6000 N		167.6000 N		A	IA Primary A/G
15	Tactical	CALCORD	Medical	156.0750 N		156.0750 N	156.7	A	
16	Air Guard	AIR GUARD	Emergency	168.6250 N		168.6250 N	110.9	A	Urgent Aircraft Contact
17								A	
18								A	
19								A	
20	Air Guard	AIR GUARD	Emergency	168.6250 N		168.6250 N	110.9	A	Urgent Aircraft Contact

Approved By & Position Title
 COMML Phil Shafer/ COMML T Harold Reed Nor Cal Team 1
 Incident Location: Hayfork, CA
 County: Trinity State: CA Latitude 00° 0.00' N, Longitude 000° 0.0' W

Convention calls for frequencies to show four digits to the right of the decimal point, followed by either an "N" or a "W", N being Narrow, W being Wide band Mode refers to either "A" or "D" indicating analog or digital (e.g. Project 25) or "I/A" indicating mixed mode. All channels are shown as if programmed in a base station, mobile or portable radio. Repeater and base stations will be programmed with the Rx and Tx reversed.

AIR OPERATIONS SUMMARY

Prepared By: Glenn Dietz

Prepared Date: Sept 11, 2015

Prepared Time: 1900

1. INCIDENT NAME:		2. OPS PERIOD DATE:		START TIME:		END TIME:		SUNRISE:		SUNSET:	
FORK COMPLEX (CA-SHF-2067)		Sept. 12-14, 2015		0700		2000		9/12: 0650 9/13: 0651 9/14: 0652		9/12: 1929 9/13: 1927 9/14: 1925	
3. REMARKS (Safety Notes, Hazards, Air Operations Special Equipment, etc.):				4. READY ALERT AIRCRAFT				5. TFR #:			
**Be aware of terrain influenced winds & wires crossing the Trinity River watershed as well as powerlines through the center of the South fire, East-West.				MEDEVAC: H-506				NO TFR			
Reference SHF Air Hazard Map as well as Fork Air Ops Maps available on ftp site.				*CALCORD TONE 6***							
**Track where water was taken from. All buckets/tanks must be cleaned after dipping out of the main stem Trinity River & before dropping on the South Complex.				INITIAL ATTACK: H-506							

6. PERSONNEL		NAME	PHONE #	7. FREQUENCIES		AM	FM	8. FIXED-WING- Type/ Make-Model/ N#/ Base	
AOBD				AIR/AIR RW-FF	118.950			AIRTANKERS- Order through RICC as needed.	
ASGS				AIR/ AIR RW-FF				LEAD PLANES- Order through RICC as needed.	
				AIR TO GROUND		166.8750		ATGS AIRCRAFT- Order through RICC as needed.	
HLCO				COMMAND		SEE COMM PLAN			
HEB2				DECK		163.1000			
				TOLC					
Trinity Helibase			530-286-2249	MEDIVAC ON		156.0750			
			530-286-2251	CALCORD		TONE 6		OTHER FW AIRCRAFT-	

9. HELICOPTERS (Use Additional Sheets as Necessary)

FAA N#	T Y	MAKE/ MODEL	BASE	AVAIL	START	REMARKS	FAA N#	T Y	MAKE/ MODEL	BASE	AVAIL	START	REMARKS
H-506	2	Bell 205 A1	Trinity HLB	0700	0800	Pax, Bucket, Recon							
H-553	3	Bell 407	Trinity HLB	0700	0800	Pax, Bucket, Recon							

10. TASK/ MISSION/ ASSIGNMENT (Type/ function includes: Air Tactical, Retardant, Recon, Personnel Transport, Bucket Operations, SAR, etc.

TYPE/FUNCTION	NAME OF PERSONNEL OR CARGO (if applicable) or instructions for tactical aircraft		MISSION START	FLY FROM	FLY TO
Recon	As needed, order through South Communications.			Trinity Helibase	
Water Dropping	As needed, order through South Communications.			Trinity Helibase	

MEDICAL PLAN (ICS 206 WF)

1. Incident/Project Name				2. Operational Period				
Fork Complex				Date/Time 9/12/15 To 9/14/15 0600-2000				
3. Ambulance Services								
Name	Location	Phone & EMS Frequency		Advanced Life Support (ALS)				
				Yes	No			
Trinity County Ambulance	Hayfork, CA	530-226-2400		X				
4. Air Ambulance Services								
Name	Phone	Type of Aircraft & Capability						
Reach or PHI 30 min eta	911 or 530-623-8128 (Trinity Co. Sheriff)	Air Ambulance – Redding, CA Day / Night						
Coast Guard Up to 1.5 hr eta	911 or 707-839-6100	BLS Hoist - Rescue – Eureka, CA Day/ Night						
CHP 30 min eta	911 or 530-623-8128 (Trinity Co. Sheriff)	ALS Hoist – Redding, CA						
Incident Helicopter 18 min eta	530-286-2251 (Trinity Helibase)	BLS long line Capably- Trinity Helibase						
5. Hospitals								
Name & Level	GPS Datum – WGS 84 Degrees Decimal Minutes		Travel Time		Phone	Helipad		Address
	Lat:	N40°44.34		15 min	1 hrs	530-623-5541	X	410 N. Taylor St. Weaverville, CA
Trinity Hospital (Basic)	Long:	W122°56.39						
	VHF:							
	Lat:	N40°35.15		35 min	2 hrs	530-225-7201	X	2175 Rosaline Ave Redding, CA
Mercy Medical Center (level 3 Trauma/ cardiac stroke)	Long:	W122°23.25						
	VHF:							
	Lat:	N40°35.08		35 min	2 hrs	530-244-5353	X	1100 Butte, Redding, CA
Shasta Regional Medical Center (level 2 Trauma/ Cardiac / Stroke)	Long:	W122°23.25						
	VHF:							
	Lat:	N38°33.17		1 hr	4.5 hrs	916-734-3636 916-734-3790	X	2315 Stockton Blvd. Sacramento, CA
UC Davis Level I Trauma/Burn Center	Long:	W121°27.05						
	VHF:							

6. Division / Crew Pre-plan, Update and discuss with assigned resources daily

Crew EMTs & Equipment

Fireline EMTs & Location
Adv. Life Support?

Air Hoist site:
Lat: / Long:

Helispot:
Lat: / Long: Hay Fork Airport - N40°33.00 X W123°11.00

Alternate no-fly plan:

7. Remote Aid Stations

None

Point of Contact:

EMS Responders & Capability:

Equipment Available on Site:

Ambulance ETA :

8. Prepared By (Medical Unit Leader)

9. Date/Time

10. Reviewed By (Safety Officer)

11. Date/Time

Travis Robinson – MEDL (T)

9/11/15 1100

Jim Mackensen SOF2

9-10-15

HAZARD TREE – NO WORK ZONES (NWZ)

Felling Safety Category

Knowing when the exact time a given hazard tree (or compromised section) will fail is an extremely difficult, and is, in many cases, an unpredictable task. Given this fact, we need to manage firefighters' exposure to these hazards by creating a safe work area or NWZ. The size and extent of the NWZ must be determined by onsite conditions, such as terrain, lean, active fire in the tree and adjoining trees.

When an identified hazardous tree cannot be felled, then perform an assessment of which areas have too high a risk, and post a lookout to warn the personnel to stay clear of these areas while working in adjacent areas. If hazard still exists before leaving the area, flag the NWZ so that personnel entering the area will be able to recognize the hazard. Use the following failure zone illustrations as examples to help manage firefighter exposure to these identified hazards. Also remember to include the possibility of the "Domino Effect" to surrounding trees.

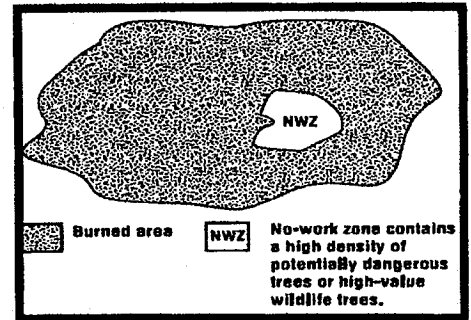
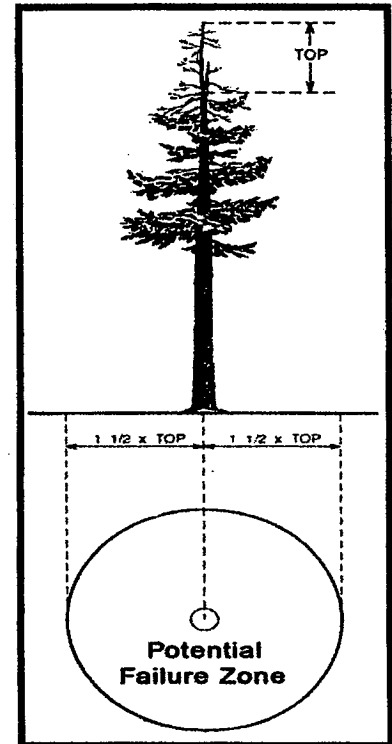
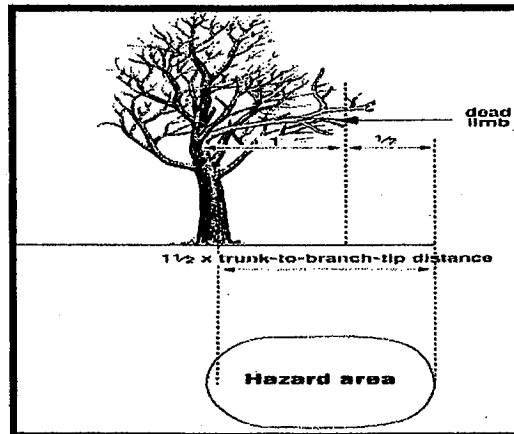
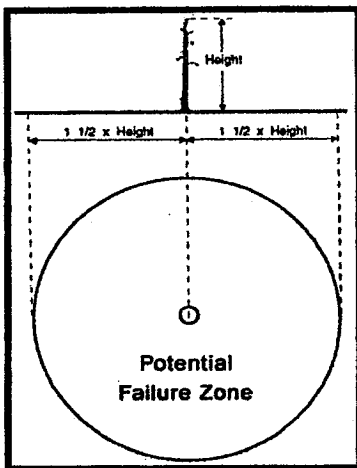


Figure 1 – 1 1/2 X Height of snag Figure 2 – 1 1/2 X trunk-to-branch-tip distance , Figure 3 - 1-1/2 X length of dead top.



References: Hazard Tree Assessor's Guide @ [Hazard Tree Safety Web Page](#)

Have an idea? Have feedback? Share it.

EMAIL | [Facebook](#) | MAIL: 6 Minutes for Safety Subcommittee • 3833 S. Development Ave • Boise, ID 83705 | FAX: 208-387-5250



ENTRAPMENT AVOIDANCE

Operational Engagement Category

Avoiding situations where firefighters become entrapped is the first concern when devising strategy and tactics. The following discussion points are among the things that should be considered.

- Discuss the three types of safety zones and describe examples.
 - The burn
 - Natural features
 - Constructed sites

- Discuss the guidelines for distance separation to avoid radiant heat injury.
 - Four times the maximum flame height (20 feet-flame height x 4 = 80 feet radius from firefighters)
 - Discuss size based on amount of resources and equipment in the area.

- Discuss heat impact factors that will affect the guidelines for distance separation.
 - Convection heat from wind and terrain features
 - Location relative to fire spread
 - Reburn potential of fuel in safety zone

- Discuss that firefighter's have a right to know the location of their escape routes and safety zones at all times.
- Discuss that firefighter have a right to ask for clarification when faced with unclear instructions or fear of the unknown.
- Describe a basic procedure for identification of effective escape routes and safety zones.
 - Observe
 - Visualize
 - Identify
 - Time
 - Inform
 - Evaluate

Have an idea? Have feedback? Share it.

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This Day in History is a brief summary of a powerful learning opportunity and is not intended to second guess or be judgmental of decisions and actions. Put yourself in the following situation as if you do not know what the outcome will be. What are the conditions? What are you thinking? What are YOU doing?

Tuolumne Fire - September 12th 2004 - California

Incident Summary: The Tuolumne Fire is reported by a Stanislaus lookout at 1233 hours. Dispatch initiates a standard response, including the dispatch of a helicopter with helitack crew. 1259 Air Attack (ATGS) arrives over fire and reports fire to be between 5-10 acres, spreading up-slope and up-canyon with a steady 3-5mph wind. The fire is burning near the bottom of the Tuolumne River Canyon, just upstream of a major river confluence at 1450' elevation in light, flashy fuels, predominantly oak leaf litter, light grass and mixed brush with an oak overstory consistent with Fuel Model 2. FDFM (Fine Dead Fuel Moisture) is 4-5% and live fuel moistures at critical stage. Temperature is 89-94, RH 18-24%, and there is no frontal or thunderstorm activity. The canyon is very steep, observed to be 80-120% slope. At approximately 1335 the helitack crew begins constructing downhill fireline. 10 minutes later they take emergency action when a sudden wind shift that causes a fire flare-up which overruns their position. Of the 7 person crew, 3 firefighters suffer minor injuries and one firefighter is killed.

1305 the helicopter arrives over the fire and drops the crew on a gravel bar 3/4 mile downstream of the fire. They hike from the LZ up-canyon to a dirt road that parallels the river and walk the road toward the right flank of the fire. The fire is burning both above and below the road. Their helicopter is directed to begin dropping water on right flank **above** the road.

A local Division Chief is dispatched to the fire to be IC and drives past the helitack crew to the right flank. He observes a slow backing fire and returns to the location of the helitack crew, who are still hiking. Talking with the helitack captain, he does not identify himself as IC, announce a strategy or specific tactics. He does state that he wants the crew to find a safe anchor point but the crew understands him to want them to "anchor this fire on the right flank, the road **down** to the river".

1335 the crew arrives at the right flank on the road and looks for access to the river and safe access to the bottom of the fire.

ATGS and IC decide to continue to use the helicopter on the right flank **above** the road. The helitack captain hears this exchange on the radio.

ATGS receives a radio call about a spot fire and misses discussion about helitack crew working below the road. (In a post-incident interview, the ATGS will state that he thought the crew was above the road.)

After scouting down the right flank about 70 feet, it is decided to construct indirect fire line downhill for 250 - 300ft to the river burning out from the road as they go. Safety zones are identified as down to the river, up to the road or into the black. All crew members agree with the plan and inform their helicopter pilot.

An engine is assigned to support the helitack crew. The crew is not notified that the engine was assigned to support them and that it was close by.

1340 firefighters located about 30ft down the line from the road remark that the burn out is pulling in nicely. There is a "flutter" in the wind and the 3 firefighters closest to the road are told to grab backpack pumps just in case.

1345 a sudden wind shift causes the fire to flare- up, change direction, and overrun the crew. 30 seconds later one crew member is dead. No fire shelters are deployed.

Lessons Learned Discussion Points

During size-up, what fire behavior did the personnel observe? If you were at a fire in a similar setting, what local terrain features and other factors might lead you to distrust the fire behavior seen?

It is common for people to have communication problems. On an incident where these issues can easily compromise anyone's life safety, what are you going to do to minimize communication errors... as a Crew member? Crew boss? Pilot? IC?

Your crew has been dispatched to this fire. How will you handle the "Lookout" aspect of LCES? It is common to hear that "everyone on the crew is a lookout". Discuss what each person must do to make this an effective alternative to the "traditional" lookout.

This fire had an Air Attack and a helicopter. Discuss if and how aerial resources can be used as additional lookouts and sources of information. What are some downfalls to using them in this role?

Appendix A

Effective Waterbars

When locating and building water bars, place them the right **distance** apart, at a **diagonal** to the fireline, so that they **divert**, then **discharge**, then **dissipate** the energy of the flowing water. Be sure to make them deep enough so they'll be durable, and that soil does **not block** the water bar outlet.

Recommended spacing for waterbars on firelines.

Fireline slope %	Maximum Distance Apart (feet)
1-5	200
6-20	125
21-40	60
41-60	40
>60	25

Waterbars should be at least 2 pulaski (4-6 inches) widths wide and 12-24 inches high for handlines.

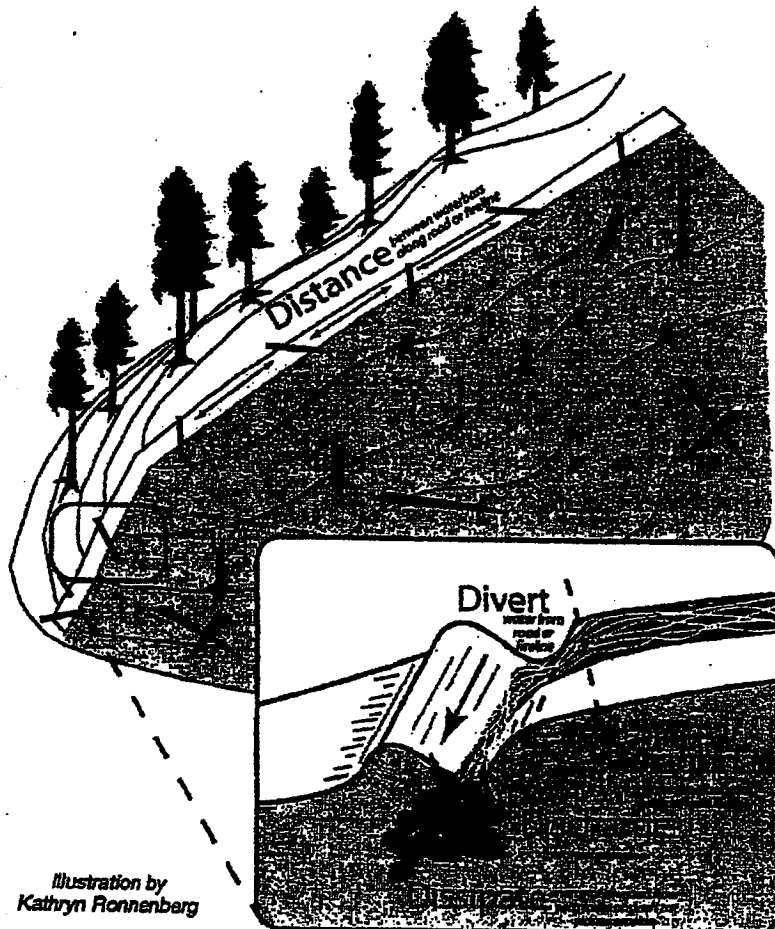


Illustration by
Kathryn Ronnenberg

Fork Complex Fire

Work Assignments - Repair

Saturday-Monday
September 12-14, 2015

DIVISION M/N:

Hand clean culverts or over side drains impacted by road grading or other suppression use

- Resources as available

Repair Chancelulla Gulch crossing with Mini Excavator

- Dave Brown (SHF Hayfork)
- Josh Smith READ

DIVISION R:

Hand clean culverts or over side drains impacted by road grading or other suppression use

- Resources as available

ROADS

Barker Fire: Repair 06, 25 and 25A roads.

- Chad Lawson, Roads Group

