

# **South Complex**

**Incident Action Plan**

**Sunday, September 6<sup>th</sup>, 2015**

**Day Shift, 0700 - 1900**

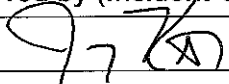


- ✓ **Warming & Drying = Higher Temps & Lower RH's**
  - **Hydration needs increase**
  - **Potential for increased Fire behavior**
  
- ✓ **Transportation & Equipment**
  - **Is your equipment working properly?**
  - **Have you completed your pre-use inspection?**
  - **Are you wearing appropriate PPE?**
  
- ✓ **New work location?**
  - **Have you scouted your work area for hazards?**
  - **Have the hazards been mitigated?**

**CA-SHF-002108, P5J0MZ, (0514)**

**Shasta Trinity National Forest**

**Northern California Incident Management Team 1**

<b>INCIDENT OBJECTIVES</b>		1. Incident Name		2. Date Prepared		3. Time Prepared	
ICS 202		<b>SOUTH COMPLEX</b>		<b>09/05/2015</b>		<b>2000</b>	
4. Operational Period							
<b>09/06/2015 0700-1900</b>							
5. General Control Objectives for the Incident (include alternatives)							
<b>CONTROL / OPERATIONAL OBJECTIVES:</b> <ol style="list-style-type: none"> <li>1. Keep the East flank of Pattison fire: <ul style="list-style-type: none"> <li>• South of 4N29 Road in Division W</li> <li>• West of the West Fork of Miners Creek</li> <li>• North of Hayfork Creek</li> </ul> </li> <li>2. Keep all other divisions of the South Fork Complex within current containment lines.</li> <li>3. Continue implementing fire suppression damage repair in accordance with the approved plan and agency policy.</li> </ol>							
<b>MANAGEMENT OBJECTIVES:</b> <ol style="list-style-type: none"> <li>1. Provide for Firefighter and Public safety through hazard recognition and application of the risk management process.</li> <li>2. Utilize Resource Advisors and USFS personnel in identification of suppression repair work.</li> <li>3. Engage in fire suppression repair operations that are cost effective.</li> <li>4. Minimize suppression damage to natural and cultural resources.</li> <li>5. Keep public informed with current and accurate fire information including closure to assist in mitigating public safety concerns.</li> </ol>							
6. Weather Forecast for Period							
See attached spot weather forecast.							
7. General Safety Message							
See attached safety message.							
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		Traffic Plan	x	Unit Log ICS-214		
x	Medical Plan-ICS 206	x	Safety Message		Vicinity Map		
9. Prepared by				10. Approved by (Incident Commander)			
Walter Herzog				Jay Kurth 			

ORGANIZATION ASSIGNMENT LIST				
1. Incident Name		Ordering	Ron Pierce, Tamara Hanna	
<b>South Complex</b>		Facilities Unit	Jeff Huhtala, Richard Crowther (t)	
2. Date	3. Time	Ground Support Unit	Harry Zabel, Kristen Lark (t)	
September 5, 2015	1630	Communications Unit	Phil Shafer, Harold Reed (t)	
4. Operational Period		Medical Unit	Josh Ramey	
<b>Day Shift September 6, 2015</b>		Receiving & Distribution	Fred Johnson	
Position	Name		Security Manager	Mike Turner
5. Incident Commander and Staff			Food Unit	Jay Westlake, Mark McGuinness (t)
Incident Commander	Jay Kurth		Equipment Manager	Mona Lake
Deputy	Kent Swartzlander		9. Operations Section	
Incident Commander (t)	Curtis Coots (t)		Day Operations	Alec Lane
Safety Officer	Michele Tanzi, Jeff Barnhart, Jim Mackenson		Night Operations	
Information Officer	Barbara Rebiskie		Planning Ops	Curt Lindstrand
Liaison Officer	Kathy Hardy		a. Division/Groups - Day	
Human Resources			Division/Group	H/L/M Randy Jennings, Ray Dombroski (t)
6. Agency Representative			Division/Group	O/Q Bret Davidson
Agency Administrator	Dave Myers		Division/Group	S/Z/T Dale Schmidt
Agency Admin Rep	Tom Hall, Randall Walker		Division/Group	W/X Unstaffed
Shasta NF Duty Chief	Ben Newburn		Division/Group	Y Nick Bunch
Lead Resource Advisor	Matt Scott, Lois Shoemaker		Division/Group	
Trinity County Sheriff	Mike Rist		Division/Group	
Trinity County Advisor	Larry Winter		Division/Group	
PG&E	Joe Little		b. Division/Groups - Night	
American Red Cross	Kendra Pospychalla		Division/Group	
Hyampom Volunteer FD	Joe Watkins		Division/Group	
CHP	Mike Arpai		Division/Group	
Trinity PUD	Rory Barret		Division/Group	
CCC	Steven Donnelly		c. Air Operations Branch	
7. Planning Section			Air Operations Branch Director	Glenn Dietz
Chief	Walter Herzog		Air Attack Supervisor	
Deputy			Air Support Supervisor	
Resources / Demob / Documentation / Status-Check-in Unit	Rita Mustalia, Tanya Costello (t)		Helicopter Coordinator	
Situation Unit	Tim Ritchey		Air Tanker Coordinator	
Training	Dominic Panno		10. Finance Section	
CTSP	George Steel		Chief	Lois Charlton
GISS	Matt Dickinson, Elizabeth Hale, Shawn Thorton		Time Unit	
FBAN	John Wood		Cost Unit	Kenny Lucien
IMET	Phil Manuel		Compensation/Claims Unit	Debbie McIntosh
SCKN	Ronnee -Sue Helzner		Equipment Time	Lou Ann Charbonnier
8. Logistics Section			PTRC	Alexandra Behr
Chief	Ken Kumpe, Richard Sheets (t)		Prepared by (Resource Unit Leader)	
Deputy			Tanya Costello (t)	
Supply Unit	Dave Alicea (t)		Approved by (Planning Section Chief)	
			Walter Herzog	

<b>DIVISION ASSIGNMENT LIST</b>		1. Branch		2. Division/Group <b>H/L/M 1 OF 2</b>		
3. Incident Name <b>SOUTH COMPLEX</b>		4. Operational Period Date: <b>September 6, 2015</b> Time: <b>0700 - 1900</b>				
5. Operations Personnel						
Operations Chief	ALEC LANE	Division/Group Supervisor		RANDY JENNINGS, RAY DOMBROSKI (T)		
Planning Ops.	CURT LINDSTRAND	Air Ops. Branch		GLENN DIETZ		
6. Resources Assigned this Period						
Strike Team/Task Force/ Resource Designator	Leader	LWD	Number Persons	Trans. Needed	Drop Off PT./Time	Pick Up PT./Time
HC- T2IA FIRESTORM #15 C-114	DUANE FIELDS	9/9	20	N	0700	1900
HC-T2IA GFP ENT. C-113	JASON CAMPBELL	9/11	20	N	0700	1900
ENG S/T - T3 - 3660C CA-PNF E-338	COTTINGHAM/ LONG (t)	9/13	27	N	0700	1900
ENG - T3 - CA SHF # 371 E-336	KEVIN MOGLIA	9/12	5	N	0700	1900
ENG - T3 - HYM 3331 E-224	MIKE BYRD	9/29	2	N	0700	1900
ENG - T6 - MOUNT ADAMS E-330	CHARLES NEWDERLY	9/12	3	N	0700	1900
WT-T2 #21 E-293	DENNIS FRANKLIN	9/9	1	N	0700	1900
WT SIERRA WATER E-239	ROBERT DARLING	9/8	1	N	0700	1900
DOZ T2 HAYS EQUIP. E-170	CHARLIE CIGANOVICH	9/10	1	N	0700	1900
EXCAV-T3-WILCOX CO. E-332	RICK WILCOX	9/12	1	N	0700	1900
EXCAV-T2-KIRACK E-328	POTTER	9/10	1	N	0700	1900
CHIPPER FIRESTORM E-309	TYSON LOWE	9/7	1	N	0700	1900
TFLD O-775	CASEY LOVELL	9/15	1	N	0700	1900
TFLD (t) O-776	JESSE LOEFFLER	9/15	1	N	0700	1900
TFLD O-770	DAVE BAKAS	9/17	1	N	0700	1900
7. Control Operations						
Mop up as needed to maintain containment.						
Continue to patrol and secure lines.						
Continue suppression repair on contingency lines and control lines as well as assess and repair Drop Points and roads in coordination with READS.						
Special Instructions:						
Identify resources available to respond for initial attack.						
Utilize water use log sheet and turn into DIVS at end of shift.						
Coordinate with ground support to backhaul any miscellaneous equipment and trash.						
All suppression repair activities will be coordinated by the lead READ.						
Check in with lead READ at end of shift to track suppression repair work.						
Remove flagging if no longer in use.						
AMR Medic 230 staged at DP-19						
9. Division Group Communication Summary						
Function	Channel	Channel Name	RX Frequency N/W	RX Tone	TX Frequency N/W	TX Tone
Command	1	NIFC C3	168.0750 N	131.8	170.4250 N	131.8
Command	2	NIFC C31	163.5750 N	131.8	169.7250 N	131.8
Tactical	6	NIFC T3	168.6000	131.8	168.6000	131.8
A/G Command	10	A/G CMD	168.7375 N		168.7375 N	
Prepared by (Resource Unit Leader) Tanya Costello (t)			Approved by (Planning Section Chief) Walter Herzog		Date September 5, 2015	

<b>DIVISION ASSIGNMENT LIST</b>		1. Branch		2. Division/Group <b>H/L/M 2 OF2</b>		
3. Incident Name <b>SOUTH COMPLEX</b>		4. Operational Period Date: <b>September 6, 2015</b> Time: <b>0700 - 1900</b>				
5. <b>Operations Personnel</b>						
Operations Chief	ALEC LANE	Division/Group Supervisor		RANDY JENNINGS, RAY DOMBROSKI (T)		
Planning Ops.	CURT LINDSTRAND	Air Ops. Branch		GLENN DIETZ		
6. <b>Resources Assigned this Period</b>						
Strike Team/Task Force/ Resource Designator	Leader	LWD	Number Persons	Trans. Needed	Drop Off PT./Time	Pick Up PT./Time
TFLD (t) O-771	JENNIFER McDOWELL	9/17	1	N	0700	1900
HEQB O-772	AARON LATTA	9/22	1	N	0700	1900
HEQB (t) O-777	KRISTOPHER DARNALL	9/16	1	N	0700	1900
HEQB (t) O-791	RICHARD LUCIUS	9/18	1	N	0700	1900
SOFR O-695 (Share w/ DIV Y)	THOMAS DONOHOE	9/14	1	N	0700	1900
SOFR (t) O-787 (Share w/ DIV Y)	BRAD PALMER	9/19	1	N	0700	1900
FEMP O-579 (Share w/ DIV Y)	PAUL SALVESTRIN	9/6	1	N	0700	1900
FEMP O-5492 (Share w/ DIV Y)	FRANK GALLO	9/7	1	N	0700	1900
FEMT O-786 (Share w/ DIV Y)	JOSH TUCKER	9/19	1	N	0700	1900
READ O-424	DENICE EDGAR	9/8	1	N	0700	1900
READ O-666	RAY CABLAYAN	9/11	1	N	0700	1900
READ O-773	BRENNA MONTAGNE	9/16	1	N	0700	1900
READ O-613	NICOLE BRILL	9/10	1	N	0700	1900
7. <b>Control Operations</b> Mop up as needed to maintain containment. Continue to patrol and secure lines. Continue suppression repair on contingency lines and control lines as well as assess and repair Drop Points and roads in coordination with READS.						
Special Instructions: Identify resources available to respond for initial attack. Utilize water use log sheet and turn into DIVS at end of shift. Coordinate with ground support to backhaul any miscellaneous equipment and trash. All suppression repair activities will be coordinated by the lead READ. Check in with lead READ at end of shift to track suppression repair work. Remove flagging if no longer in use. AMR Medic 230 staged at DP-19						
9. <b>Division Group Communication Summary</b>						
Function	Channel	Channel Name	RX Frequency N/W	RX Tone	TX Frequency N/W	TX Tone
Command	1	NIFC C3	168.0750 N	131.8	170.4250 N	131.8
Command	2	NIFC C31	163.5750 N	131.8	169.7250 N	131.8
Tactical	6	NIFC T3	168.6000	131.8	168.6000	131.8
A/G Command	10	A/G CMD	168.7375 N		168.7375 N	
Prepared by (Resource Unit Leader) Tanya Costello (t)		Approved by (Planning Section Chief) Walter Herzog			Date September 5, 2015	

<b>DIVISION ASSIGNMENT LIST</b>		1. Branch		2. Division/Group <b>O/Q</b>		
3. Incident Name <b>SOUTH COMPLEX</b>		4. Operational Period Date: <b>September 6, 2015</b> Time: <b>0700 - 1900</b>				
5. Operations Personnel						
Operations Chief	ALEC LANE	Division/Group Supervisor		BRET DAVIDSON		
Planning Ops.	CURT LINDSTRAND	Air Ops. Branch		GLENN DIETZ		
6. Resources Assigned this Period						
Strike Team/Task Force/ Resource Designator	Leader	LWD	Number Persons	Trans. Needed	Drop Off PT./Time	Pick Up PT./Time
ENG T6 OUTBACK E-8	LEE HOWARD	9/13	3	N	0700	1900
ENG T6 RAMOS EAGLE E-272	ROBERT MORRIS	9/13	3	N	0700	1900
FEMT O-300 (Share w/ DIV S/Z/T)	MICHAEL BOARDAN	9/6	1	N	0700	1900
FEMP O-598 (Share w/ DIV S/Z/T)	RICHARD WALSH	9/9	1	N	0700	1900
FEMP O-784 (Share w/ DIV S/Z/T)	PAUL MOEN	9/19	1	N	0700	1900
FEMP O-785 (Share w/ DIV S/Z/T)	MIKE JACOB	9/19	1	N	0700	1900
SOF2 O-774.58 (Share w/ DIV S/Z/T)	JEFF BARNHART	9/16	1	N	0700	1900
7. Control Operations						
Mop up as needed to maintain containment.						
Continue to patrol and secure lines.						
Continue suppression repair on contingency lines and control lines as well as assess and repair Drop Points and roads in coordination with READS.						
Special Instructions:						
Identify resources available to respond for initial attack.						
Utilize water use log sheet and turn into DIVS at end of shift.						
Remove flagging if no longer in use.						
AMR Medic 230 staged at DP-19						
9. Division Group Communication Summary						
Function	Channel	Channel Name	RX Frequency N/W	RX Tone	TX Frequency N/W	TX Tone
Command	2	NIFC C31	163.5750 N	131.8	169.7250 N	131.8
Tactical	4	NIFC TAC 1	168.0500	131.8	168.0500	131.8
A/G Command	10	A/G CMD	168.7375 N		168.7375 N	
Prepared by (Resource Unit Leader) Tanya Costello (t)		Approved by (Planning Section Chief) Walter Herzog			Date September 5, 2015	

<b>DIVISION ASSIGNMENT LIST</b>		1. Branch		2. Division/Group <b>S/Z/T 1 OF 2</b>		
3. Incident Name <b>SOUTH COMPLEX</b>		4. Operational Period Date: <b>September 6, 2015</b> Time: <b>0700 - 1900</b>				
5. Operations Personnel						
Operations Chief	ALEC LANE	Division/Group Supervisor		DALE SCHMIDT		
Planning Ops.	CURT LINDSTRAND	Air Ops. Branch		GLENN DIETZ		
6. Resources Assigned this Period						
Strike Team/Task Force/ Resource Designator	Leader	LWD	Number Persons	Trans. Needed	Drop Off PT./Time	Pick Up PT./Time
HC2 OC 36 C-111	BRIAN ETHERIDGE	9/11	20	N	0700	1900
ENGT3 FIRESTORM E-289	TOMMEL VANCE	9/13	3	N	0700	1900
ENGT6 SHANK E-18	RYAN FLORES	9/11	3	N	0700	1900
ENGT6 MOUNT ADAMS #323 E-329	PAULA HOLTER	9/11	3	N	0700	1900
ENGT6 MOUNT ADAMS #322 E-331	DONALD HOLTER	9/11	3	N	0700	1900
WT-T2 DARRAH LOGGING E-37	MARVIN DARGER	9/12	1	N	0700	1900
WT-T2 WILLMORE ENT. E-32	JESSE HOLDEN	9/13	1	N	0700	1900
WT-T2 DARRAH LOGGING E-234	WAYNE VIRAG	9/12	1	N	0700	1900
WT- T2 CA-TNF # 4289 E-291	PEDRO BARBA	9/8	1	N	0700	1900
DOZ-T1-BEN'S TRUCK #19 E-109	BILL SCARBOROUGH	9/10	1	N	0700	1900
DOZ2 MODOC #4 E-279	PERRY ST. JOHN/ INSLEY (T)	9/15	2	N	0700	1900
DOZ2 NORTH RIVERS E-209	MIKE NICHOLS	9/6	1	N	0700	1900
EXCA2 NORTH RIVERS E-319	TIM BECK	9/13	1	N	0700	1900
EXCA2 ELLENBERGER E-320	WALBERG	9/10	1	N	0700	1900
EXCA2 WANNER ENT. E-333	ZANE CLAIRE	9/13	1	N	0700	1900
MAST T2 CARLSON CONST. S-24	CASEY CARLSON	9/13	1	N	0700	1900
SKIDDER CRANE MILLS E-553	SHAWN CARTER	9/19	1	N	0700	1900
GRADER E-334	ED STONE	9/13	1	N	0700	1900
CHIPPER WELL EQUIPED E-337	RONALD ADKINS	9/13	1	N	0700	1900
HEQB O-751	DARREN BEATY	9/15	1	N	0700	1900
HEQB O-752	MICHAEL GROSENBACH	9/15	1	N	0700	1900
TFLD O-765	KARL FOWLER	9/17	1	N	0700	1900
9. Division Group Communication Summary						
Function	Channel	Channel Name	RX Frequency N/W	RX Tone	TX Frequency N/W	TX Tone
Command	2	NIFC C31	163.5750 N	131.8	169.7250 N	131.8
Command	3	NIFC C39	173.8750N	131.8	163.6625N	131.8
Tactical	8	R5 TAC 5	167.1125 N	131.8	167.1125 N	131.8
A/G Command	10	A/G CMD	168.7375 N		168.7375 N	
Prepared by (Resource Unit Leader) Tanya Costello (t)		Approved by (Planning Section Chief) Walter Herzog			Date September 5, 2015	

<b>DIVISION ASSIGNMENT LIST</b>			1. Branch			2. Division/Group <b>S/Z/T 2 OF 2</b>		
3. Incident Name <b>SOUTH COMPLEX</b>			4. Operational Period Date: <b>September 6, 2015</b> Time: <b>0700 - 1900</b>					
5. <b>Operations Personnel</b>								
Operations Chief		ALEC LANE		Division/Group Supervisor		DALE SCHMIDT		
Planning Ops.		CURT LINDSTRAND		Air Ops. Branch		GLENN DIETZ		
6. <b>Resources Assigned this Period</b>								
Strike Team/Task Force/ Resource Designator		Leader		LWD	Number Persons	Trans. Needed	Drop Off PT./Time	Pick Up PT./Time
TFLD (t) O-795		BRIAN MIDTLYNG		9/17	1	N	0700	1900
TFLD (T) O-568		KURT STEELE		9/8	1	N	0700	1900
FELB O-566		PATRICK DOYLE		9/7	1	N	0700	1900
TFLD (t) O-789		DUANE KNIGHTON		9/18	1	N	0700	1900
STEQ O-513		JEFFERY SMITH		9/9	1	N	0700	1900
FOBS O-757		BEAU RICHWINE		9/16	1	N	0700	1900
SOFR O-774.58 (Share w/ DIV O/Q)		JEFF BARNHART		9/16	1	N	0700	1900
FEMT O-300 (Share w/ DIV O/Q)		MICHAEL BOARDAN		9/6	1	N	0700	1900
FEMP O-598 (Share w/ DIV O/Q)		RICHARD WALSH		9/9	1	N	0700	1900
FEMP O-784 (Share w/ DIV O/Q)		PAUL MOEN		9/19	1	N	0700	1900
FEMP O-785 (Share w/ DIV O/Q)		MIKE JACOB		9/19	1	N	0700	1900
READ O-144		MIGUEL JEFFREY		9/7	1	N	0700	1900
READ O-774.34		KRISTEN LARK		9/16	1	N	0700	1900
READ O-779		JOHAN HOGERVORST		9/17	1	N	0700	1900
READ O-796		BLAKE CREAGAN		9/19	1	N	0700	1900
THSP O-768		STACY HIGHTOWER		9/15	1	N	0700	1900
7. Control Operations Mop up as needed to maintain containment. Continue to patrol and secure lines. Continue suppression repair on contingency lines and control lines as well as assess and repair Drop Points and roads in coordination with READS.								
Special Instructions: Identify resources available to respond for initial attack. Utilize water use log sheet and turn into DIVS at end of shift. Coordinate with ground support to backhaul any miscellaneous equipment and trash. All suppression repair activities will be coordinated by the lead READ. Check in with lead READ at end of shift to track suppression repair work. Remove flagging if no longer in use. AMR Medic 230 staged at DP-19.								
9. Division Group Communication Summary								
Function	Channel	Channel Name	RX Frequency N/W	RX Tone	TX Frequency N/W	TX Tone		
Command	2	NIFC C31	163.5750 N	131.8	169.7250 N	131.8		
Command	3	NIFC C39	173.8750N	131.8	163.6625N	131.8		
Tactical	8	R5 TAC 5	167.1125 N	131.8	167.1125 N	131.8		
A/G Command	10	A/G CMD	168.7375 N		168.7375 N			
Prepared by (Resource Unit Leader) Tanya Costello (t)			Approved by (Planning Section Chief) Walter Herzog			Date September 5, 2015		



<b>DIVISION ASSIGNMENT LIST</b>			1. Branch		2. Division/Group <b>W/X</b>	
3. Incident Name <b>SOUTH COMPLEX</b>			4. Operational Period Date: <b>September 6, 2015</b> Time: <b>0700 - 1900</b>			
5. <b>Operations Personnel</b>						
Operations Chief	ALEC LANE		Division/Group Supervisor			
Planning Ops.	CURT LINDSTRAND		Air Ops. Branch		GLENN DIETZ	
6. <b>Resources Assigned this Period</b>						
Strike Team/Task Force/ Resource Designator	Leader	LWD	Number Persons	Trans. Needed	Drop Off PT./Time	Pick Up PT./Time
PATROL BY AIR						
7. Control Operations Monitor and bucket work as directed by ops.						
Special Instructions: AMR Medic 230 staged at DP-19						
9. <b>Division Group Communication Summary</b>						
Function	Channel	Channel Name	RX Frequency N/W	RX Tone	TX Frequency N/W	TX Tone
Command	1	NIFC C3	168.0750 N	131.8	170.4250 N	131.8
Command	3	NIFC C39	173.8750N	131.8	163.6625N	131.8
Tactical	7	R5 TAC 4	166.5500	131.8	166.5500	131.8
A/G Command	10	A/G CMD	168.7375 N		168.7375 N	
Prepared by (Resource Unit Leader) Tanya Costello (t)			Approved by (Planning Section Chief) Walter Herzog		Date September 5, 2015	

<b>DIVISION ASSIGNMENT LIST</b>			1. Branch		2. Division/Group <b>Y</b>		
3. Incident Name <b>SOUTH COMPLEX</b>			4. Operational Period Date: <b>September 6, 2015</b> Time: <b>0700 - 1900</b>				
5. <b>Operations Personnel</b>							
Operations Chief		ALEC LANE		Division/Group Supervisor		NICK BUNCH	
Planning Ops.		CURT LINDSTRAND		Air Ops. Branch		GLENN DIETZ	
6. <b>Resources Assigned this Period</b>							
Strike Team/Task Force/ Resource Designator		Leader	LWD	Number Persons	Trans. Needed	Drop Off PT./Time	Pick Up PT./Time
ENG T3 CA-SHF 12 - E-335		MATT PUCKETT	9/12	5	N	0700	1900
EVCAV-T2 CROSS COUNTRY E-327		BYRON CROSS	9/10	1	N	0700	1900
EXCAV-T2- LEPAGE CO. E-223		BROOKS / STIEFF	9/11	2	N	0700	1900
FOBS (t) O-630		BLAKE ABBOTT	9/9	1	N	0700	1900
FEMP O-579 (Share w/ DIV H/L/M)		PAUL SALVESTRIN	9/6	1	N	0700	1900
FEMP O-5492 (Share w/ DIV H/L/M)		FRANK GALLO	9/7	1	N	0700	1900
FEMT O-786 (Share w/ DIV H/L/M)		JOSH TUCKER	9/19	1	N	0700	1900
SOFR O-695 (Share w/ DIV H/L/M)		THOMAS DONOHOE	9/14	1	N	0700	1900
SOFR (t) O-787 (Share w/ DIV H/L/M)		BRAD PALMER	9/19	1	N	0700	1900
7. Control Operations							
Mop up as needed to maintain containment.							
Continue to patrol and secure lines.							
Continue suppression repair on contingency lines and control lines as well as assess and repair Drop Points and roads in coordination with READS.							
Special Instructions:							
Identify resources available to respond for initial attack.							
Utilize wafer use log sheet and turn into DIVS at end of shift.							
Coordinate with ground support to backhaul any miscellaneous equipment and trash.							
All suppression repair activities will be coordinated by the lead READ.							
Check in with lead READ at end of shift to track suppression repair work.							
Remove flagging if no longer in use.							
AMR Medic 230 staged at DP-19.							
9. Division Group Communication Summary							
Function	Channel	Channel Name	RX Frequency N/W	RX Tone	TX Frequency N/W	TX Tone	
Command	1	NIFC C3	168.0750 N	131.8	170.4250 N	131.8	
Command	3	NIFC C39	173.8750N	131.8	163.6625N	131.8	
Tactical	7	R5 TAC 4	166.5500	131.8	166.5500	131.8	
A/G Command	10	A/G CMD	168.7375 N		168.7375 N		
Prepared by (Resource Unit Leader) Tanya Costello (t)			Approved by (Planning Section Chief) Walter Herzog		Date September 5, 2015		



# South Complex Fire Weather Forecast



FORECAST NO: 61

NAME OF FIRE: South Complex

PREDICTION FOR: Sunday Day Shift

UNIT: Shasta-Trinity National Forest

SHIFT DATE: Sep 6, 2015  
TIME AND DATE

SIGNED: *Phil Manuel*

Phil Manuel  
Incident Meteorologist

FORECAST ISSUED: Sep 5, 2015 @ 1800 PDT

**WEATHER DISCUSSION:      ...A Week Of Rising Temperatures And Low Humidity...**

The upcoming week will feature abundant sunshine, steadily rising temperatures, and terrain driven winds. No rain is expected for the next 6 to 10 days.

**Weather Forecast for Sunday:**

Weather: Sunny.  
High Temperature ... Midslopes/Ridges 68-75. Lower valleys (camp) 80-85.  
Min RH (Midslopes/Ridgetops/valleys)... 14-19%  
20-FOOT WINDS:  
Ridgetop..... North-Northwest 4-8 mph.  
MidSlope..... Upslope 2-5 mph.  
Valley..... Upvalley 3-7 mph. Gusts of 10 mph during the afternoon and evening.

**Weather Forecast for Sunday Night:**

Weather: Mostly Clear.  
Low Temperature (Ridgetops)... 47-52.  
Low Temperature (Valleys)..... 42-47.  
Max RH (Midslopes/Ridgetops)..... 55-70%.  
Max RH (Valleys)..... 70-85%.  
20-FOOT WINDS:  
Ridgetop..... Northeast 3-6 mph.  
Slope/Valley..... Up valley 3-6 mph until 2200, then down valley drainage 1-3 mph.

**Weather Forecast for Monday:**

Weather: Sunny & Warmer.  
High Temperature ...Midslopes/Ridges 72-78. Lower valleys (camp) 83-88.  
Min RH (Midslopes/Ridgetops/Valleys)..... 14-19%.  
20-FOOT WINDS:  
Ridgetop..... North-Northwest 4-8 mph.  
UpSlope/UpValley..... 3-7 mph with gusts to 10 mph.

**EXTENDED OUTLOOK for Tuesday Through Thursday:**

Much Warmer. No rain. No Clouds. Highs 87-93 valleys and Lower 80s in the higher elevations. Minimum RH 12-18%. Lows 45 to 55. Good humidity recovery at night in the valleys, but fair to poor recovery for elevations above 4000 feet.

Sunrise 6:46 PDT

Sunset 7:37 PDT

# FIRE BEHAVIOR FORECAST

<b>FORECAST NUMBER:</b> 61	<b>TYPE OF FIRE:</b> Wildland Fire
<b>FIRE NAME:</b> South Complex	<b>OPERATIONAL PERIOD:</b> 9/06, 0700 to 1900
<b>DATE ISSUED:</b> 9/05/15	<b>TIME ISSUED:</b> 2000
<b>UNIT:</b> Shasta Trinity National Forest	<b>SIGNED:</b> /s/ John Wood FBAN

## INPUTS

**WEATHER SUMMARY:** The upcoming week will feature abundant sunshine, steadily rising temperatures and terrain drive winds. No rain is expected for the next 6 to 10 days.

Expect maximum temperatures Ridges: 68-75, Valleys: 80-85 Minimum humidity, 14-19%. 20 foot winds: Ridges north 4-8 mph, Mid-Slope: upslope 2-5 mph, Valleys: up valley 3-7 with gusts to 10 during the afternoon and evening.

## OUTPUTS

**GENERAL:** Areas with heat and available fuels will show some activity. As temperatures warm and relative humidity lowers expect aspect to show more influence over development of fire activity as south and west slopes will heat and dry faster than north and east slopes. The presence and amount of light fuels will raise the potential for fire activity, especially on south and west slopes. With shorter days fuels will need more time to reach burnable levels each day, though as we get back to warmer drier days this effect may not make a noticeable difference. Exposed fuels will have a faster drying time than sheltered fuels both because of exposure to wind and solar heating aiding the drying process. Fire spread will likely be limited to small areas that could support active fire spread and a change in slope, aspect and fuel moistures could substantially moderate spread potential. Soil moisture will persist with ground cover and sheltered areas and have a longer duration effect on fuel moistures on fuels in direct contact with the ground. Needle cast from scorched or underburned trees will continue to fall adding some potential for fire spread and may be a concern in areas with viable heat sources.

Backing/Flanking rate of spread up to 2 ch/hr, flame lengths 1-3 feet. Head fire in timber understory rate of spread 3-12 ch/hr, flame lengths 2-9 feet, timber litter rate of spread up to 3 ch/hr, flame lengths around 2 feet. In shrub fuels rates of spread could reach 25ch/hr, flame lengths 5-7 feet.

**SPECIFIC:** Fine fuel moisture 6% 1000 hr 12% Probability of ignition 55-75% Spot distance about a 1/4 mile.

All Divisions: Fire activity will slowly ramp up as weather continues with a warm and dry trend. This will be seen mostly in the lengthening of the burn period. Expect fire spread in areas with heat source and available fuel. Fire behavior will likely be smoldering and creeping but where fuels are exposed to the wind active burning will be possible for brief periods of fire activity. Slight changes in conditions will modify fire activity.

## AIR OPERATIONS

Smoke should not impact air operations.

## Safety Message

Discuss the potential for fire weakened trees to become hazards. Days and weeks have passed since many of these trees have burned and they may have weakened roost systems, fire damaged boles and branches may be hanging on by fire weakened wood. Discuss the need to size up any work area and develop escape routes scenarios for potential gravity hazards like snags.

# INCIDENT RADIO COMMUNICATIONS PLAN

Incident Name  
**South Complex**

Date/Time Prepared  
**9/5/15 1700**

Operational Period Date/Time  
**9/6/15 0700 - 1900**

Zn / Ch	Function	Channel Name/Trunked Talkgroup	Assignment	RX Freq	RX Tone/NAC	TX Freq	TX Tone/NAC	Mode A, D, M	Remarks
1	COMMAND	NIFC C3	ALL DIVISIONS	168.0750	131.8	170.4250	131.8	A	LIMEDYKE MT. Linked to CMD Net
2	COMMAND	NIFC C31	ALL DIVISIONS	163.5750	131.8	169.7250	131.8	A	IRONSIDE MT. Linked to CMD Net
3	COMMAND	NIFC C39	ALL DIVISIONS	173.8750	131.8	163.6625	131.8	A	HAYFORK BALLY Linked to CMD Net
4	TACTICAL	NIFC T1	DIV O / Q	168.0500	131.8	168.0500	131.8	A	
5	TACTICAL	NIFC T2	I / A	168.2000	CSQ	168.2000		A	INITIAL ATTACK
6	TACTICAL	NIFC T3	DIV H / L / M	168.6000	131.8	168.6000	131.8	A	
7	TACTICAL	R5 TAC 4	DIV W / X / Y	166.5500	131.8	166.5500	131.8	A	
8	TACTICAL	R5 TAC 5	DIV S / Z / T	167.1125	131.8	167.1125	131.8	A	
9	TACTICAL	R5 TAC 6	UNNASSIGNED	168.2375	131.8	168.2375	131.8	A	
10	AIR TO GROUND	A/G CMD	ALL DIVISIONS	168.7375	CSQ	168.7375		A	
11									
12	TACTICAL	VTAC 11	DIV H (ROUTE)	151.1375	156.7	151.1375	156.7	A	DIV H (ROUTE COMPLEX)
13	COMMAND	NIFC C37	ALL DIVISIONS (ROUTE)	172.5500	156.7	162.7750	156.7	A	ROUTE COMMAND NET
14	COMMAND	SHE TN12	FOREST NET	171.5750	CSQ	169.1000	127.3	A	SHE FOREST NET RPT TONE 12
15	TACTICAL	CALCORD	MEDICAL	156.0750	156.7	156.0750	156.7	A	
16	AIR GUARD	GUARD	All Divisions	168.6250	CSQ	168.6250	110.9	A	AIR GUARD - EMERG. USE ONLY
17									
18									
19									
20	AIR GUARD	GUARD	All Divisions	168.6250	0.0	168.6250	110.9	A	AIR GUARD - EMERG. USE ONLY

**SPECIAL INSTRUCTIONS: ROAD GROUP WILL USE THE TACTICAL THAT IS ASSIGNED TO THE DIVISION THEY ARE WORKING IN.**

Prepared By (Communications Unit Leader)

Incident Location

HYAMPOM, CA

Phil Shafer COM1/Harold Reed COM1 T, Nor Cal Team 1

County TRINITY

Latitude, Longitude

N40° 37.389" W123° 27.92"

Deviation is assumed to be narrow band unless otherwise noted in the remarks. Mode refers to either "A" (analog), "P" (digital) or "M" (mixed mode).

9/5/2015 SW

# AIR OPERATIONS SUMMARY

Prepared By: Glenn Dietz

Prepared Date: Sept 5, 2015

Prepared Time: 1900

1. INCIDENT NAME: <b>SOUTH COMPLEX (CA-SHF-2108) FORK COMPLEX (CA-SHF-2067)</b>	2. OPS PERIOD DATE: <b>Sept. 6, 2015</b>	START TIME: <b>0700</b>	END TIME: <b>2000</b>	SUNRISE: <b>0644</b>	SUNSET: <b>1938</b>
3. REMARKS (Safety Notes, Hazards, Air Operations Special Equipment, etc.): Helicopters are being shared from the River Complex. 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. **Reference SHF Air Hazard Map as well as South & Fork Air Ops Maps available on ftp site** Track where water was taken from. All buckets/tanks must be cleaned after dipping out of the Trinity River & before dropping on the South Complex.			4. READY ALERT AIRCRAFT MEDEVAC: H-553 ***CALCORD TONE 6*** INITIAL ATTACK: H-506		5. TFR #: <b>NO TFR</b>

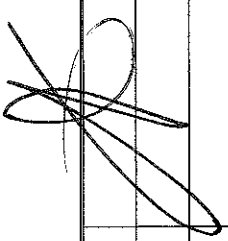
6. PERSONNEL	NAME	PHONE #	7. FREQUENCIES	AM	FM	8. FIXED-WING- Type/ Make-Model/ N#/ Base
AOBD	Glenn Dietz	ICP: 530-628-4970 Cell: 530-227-0017	AIR/AIR RW-FF	125.325		AIRTANKERS- Order through RICC as needed.
ASGS			AIR/ AIR RW-FF			LEAD PLANES- Order through RICC as needed.
			AIR TO GROUND		168.7375	ATGS AIRCRAFT- Order through RICC as needed.
HLCO			COMMAND			SEE COMM PLAN
HEB2	Brian Bates	530-286-2249	DECK		163.1000	
HEB2(t)	Josh Wilson	530-286-2251	TOLC			
			MEDIVAC ON CALCORD		156.0750	
					156.0750	OTHER FW AIRCRAFT-

9. HELICOPTERS (Use Additional Sheets as Necessary)

FAA N#	T	MAKE/ MODEL	BASE	AVAIL	START	REMARKS	FAA N#	T	MAKE/ MODEL	BASE	AVAIL	START	REMARKS
H-553	3	Bell 407	Trinity HLB	0700	0800	Pax, Bucket, PSD, Recon							
H-506	2	Bell 205 A1	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 AOBD.			
Water Dropping	As needed, order through AOBD.			



## MEDICAL PLAN (ICS 206 WF)

<b>1. Incident/Project Name</b>	<b>2. Operational Period</b>
<b>South Complex</b>	Date/Time <b>9/6/15 0700-1900</b>

<b>3. Ambulance Services</b>				
Name	Location	Phone & EMS Frequency	Advanced Life Support (ALS)	
			Yes	No
AMR medic 230 – Incident Amb.	Day – DP 19      Night - ICP	Contact on Command	X	
Hyampom Fire Dept. Ambulance	Hyampom, CA	911 or 530-623-8128		X
Trinity County Ambulance	Hayfork, CA	911 or 530-623-8128	X	

<b>4. Air Ambulance Services (COORDINATE with AIR AMBULANCES on CALCORD tone 6)</b>			
Name	Phone	Type of Aircraft & Capability	
H-553      18 min eta	Contact air ops on Command	Assigned to incident and River complex	
Reach or PHI      30 min eta	911 or 530-623-8128 (Trinity Co. Sheriff)	Air Ambulance – Redding, CA Day/Night	
Coast Guard      Up to 1:15 hr eta	911 or 707-839-6100	Hoist Rescue – Eureka, CA Day/Night	
CHP      30 min eta	911 or 530-623-8128 (Trinity Co. Sheriff)	ALS Hoist Rescue – Redding, CA	

<b>5. Hospitals</b>								
Name & Level	GPS Datum – WGS 84 Degrees Decimal Minutes		Travel Time		Phone	Helipad		Address
	Lat:	Long:	Air	Gnd		Yes	No	
Trinity Hospital	N40°44.34	W122°56.39	20 min	2 hrs	530-623-5541 x1	X		410 N. Taylor St. Weaverville, CA
	VHF:							
	St. Joseph Hospital	N40°47.02						
VHF:								
Shasta Regional Medical Center	N40°35.15	W122°23.25	35 min	3 hrs	530-244-5353	X	1100 Butte, Redding, CA	
VHF:								
UC Davis Level I Trauma/Burn Center	N38°33.17	W121°27.05						1.5 hrs
VHF:								

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

<b>Crew EMTs &amp; Equipment</b>	
<b>Fireline EMTs &amp; Location</b>	
<b>Adv. Life Support?</b>	
<b>Air Hoist site:</b>	
Lat: / Long:	
<b>Helispot:</b>	
Lat: / Long:	
<b>Alternate no-fly plan:</b>	

<b>7. Remote Aid Stations</b>	
<b>South Medical Unit-- ICP</b> Hyampom, CA N40°37.514 W123°28.019	<b>Point of Contact:</b> MEDL – Josh Ramey 530-628-4840
	<b>EMS Responders &amp; Capability:</b> Frontline Medical – Advanced Life Support
	<b>Equipment Available on Site:</b> Medical supplies
	<b>Ambulance ETA :</b> Air – 30 min.      Ground – 10 min.

<b>8. Prepared By (Medical Unit Leader)</b>	<b>9. Date/Time</b>	<b>10. Reviewed By (Safety Officer)</b>	<b>11. Date/Time</b>
Josh Ramey – MEDL 530-277-1213 <i>Joshua Ramey</i>	9/5/15 1800	Michele Tanzi <i>Michele Tanzi</i>	9/5/15 1800

# Injury or Incident Communications Protocol

DECLARE:             Medical Emergency     or             Non-emergency Medical transport

Best transport method: (circle) Ambulance   Helicopter   Vehicle

Location: (Div. & Lat / L ong) \_\_\_\_\_  
 GPS Format: WGS84 Degrees, Decimal minutes

Situation \_\_\_\_\_

Any special equipment required \_\_\_\_\_

Number of injured \_\_\_\_\_ Type of injuries \_\_\_\_\_

Closest pick up point (DP, Helispot) \_\_\_\_\_

Level of consciousness \_\_\_\_\_ Resp. \_\_\_\_\_ Pulse \_ BP \_\_\_\_\_ Weight \_  
 (alert & oriented x 1-4)

Injury \_\_\_\_\_ Agency/Crew (No Names) \_\_\_\_\_

Medical History/Allergies \_\_\_\_\_

## Air Transportation Triage

	Ground or Air Ambulance to Hosp.	Transport to Med Unit
<b>Mechanism</b>	Hit by a falling tree or large branch Fall of 10' or more Insect bite with shortness of breath Signs of heat stroke (hot, dry, disoriented) Burn Injury greater than 1% body area	Minor dehydration Cut or laceration with bleeding controlled Minor bites and Stings Minor burns
<b>Area Injured</b>	Significant Blunt or Penetrating Trauma to Head, Neck, Chest, Abdomen or pelvis Any Arm or Leg fracture above the Joint	Minor blunt trauma Minor penetrating trauma Extremity sprains and strains Simple fracture below elbow or knee
<b>Symptoms</b>	Disoriented Chest Pain <u>or</u> Shortness of Breath Weak or absent radial pulse Pale, cold and sweating	Alert and oriented No shortness of breath Good pulses

### Medivac Sites

H 1 - N40°41.674 x W123°26.164

H 2 - N40°42.833 x W123°31.051

H 3 - N40°44.081 x W123°30.039

Hyampom Airstrip (ICP) – N 40°37.514 x W123°28.019

### If air or ground ambulance is DELAYED:

Package and transport patient to rendezvous with ambulance. Re-route EMS helicopter to rendezvous point as appropriate.

### If Declaring an "Incident within the Incident"

The closest DIVS will respond to manage the incident. They are responsible for giving an accurate size up, ensuring scene safety, setting priorities and initiating an appropriate response.

The closest Safety Officer and Line EMS will respond to the scene to assist the DIVS. Secure site and begin initial investigation when situation is stabilized.



**SOUTH COMPLEX RISK ANALYSIS (215a)**  
**Day Shift, September 6<sup>th</sup>, 2015**

DIV	HAZARDOUS ACTIONS / CONDITIONS	MITIGATIONS / WARNINGS / REMEDIES	
All	Danger/Hazard Trees	<ul style="list-style-type: none"> <li>• Follow the Hazard Tree Safety guidelines on pages 22 &amp; 23 of the IRPG.</li> <li>• Survey work area/parking area for hazard trees prior to committing resources</li> <li>• Mitigate hazard if safe to do so by qualified personnel, or flag off area, deny entry and make it known to all</li> <li>• Establish trigger points for disengagement during high wind events</li> </ul>	
ALL	Medical Emergencies	<p>~ Review, understand and discuss with your resources the Medical Plan in the IAP.</p> <p>~ <b>Develop Division/Crew Pre-Plan in block #6 on the Medical Plan and fill in necessary information to assist you with an incident within an incident.</b></p> <p>~ Base all operational decisions and activities on these 3 questions:</p> <ol style="list-style-type: none"> <li>1.) What are we going to do if someone gets hurt?</li> <li>2.) How will we get them out of here?</li> <li>3.) How long will it take to get them to a hospital?</li> </ol> <p>~ If the answers are insufficient, stop, re-assess and consider alternate strategies and tactics.</p> <p>~ Have Alternate plan in place when aircraft is grounded due to visibility issues.</p> <p>~ If air or ground ambulance is delayed: package and transport patient to rendezvous with incoming ambulance.</p> <p>~ Re-route EMS helicopter to rendezvous point as appropriate</p> <p>~ <b>Be aware of Rotor Wash &amp; its effect on Fire behavior when the extraction point is next to an active fire edge. (Divisions T, X, Y)</b></p> <ul style="list-style-type: none"> <li>• <b>If possible, MOVE patient to an area with less fire activity</b></li> </ul>	
ALL	Hydration & Heat Illness	<ul style="list-style-type: none"> <li>• <b>Pre-hydrate, Re-hydrate! Dehydration is preventable.....Drink a minimum of ½ qt/hr</b></li> <li>• <b>Do NOT mix with water</b> or dilute electrolyte drink. It must be consumed as is for the body to absorb properly.</li> <li>• <b>Low volumes of dark, concentrated urine or painful urination indicate a serious need for rehydration, &amp; medical attention.</b></li> <li>• Pace work to avoid heat injuries</li> <li>• Refer to Medical Plan for additional EMS care and Evacuation</li> </ul>	
ALL	Communications	<ul style="list-style-type: none"> <li>• <b>Ensure you have received the most current communications plan, and your radios have been cloned to it BEFORE heading out to your work area.</b></li> <li>• <b>Use human repeaters in areas with sketchy communications.</b></li> <li>• Refer to the 5 communication responsibilities listed on page ix in the 2014 IRPG</li> </ul>	
W/T/X	Aircraft Operations till 2000	<ul style="list-style-type: none"> <li>• <b>Review and discuss Aviation Watch Out Situations listed in IRPG pg 44</b></li> <li>• Ensure the mission is necessary</li> <li>• Evaluate risk vs gain for each mission/target. Utilize ground resource contact with aircraft for bucket work.</li> <li>• <b>Use aerial Supervision and maintain separation.</b></li> </ul>	
W/T/X	Fire Behavior	<ul style="list-style-type: none"> <li>• <b>Ensure a solid anchor point and flank.</b></li> <li>• <b>Use experienced LOOKOUTS under these conditions.</b></li> <li>• Monitor weather conditions. Be aware of visual indicators (clouds, WX obs., cold front passage)</li> <li>• Maintain adequate escape routes and safety zones. Set trigger points when appropriate. Communicate any changes.</li> <li>• Spotting Potential still exists...up to ¼ mile. "Eyes to the green"</li> </ul>	
ALL & ICP	Driving Hazards	<ul style="list-style-type: none"> <li>• <b>Reduce speed in Developed Areas.</b> Be watchful of local traffic &amp; pedestrians.</li> <li>• <b>SEAT BELTS ON...LIGHTS ON...BEFORE wheels turn!.....even in ICP</b></li> <li>• Reduce driving speeds to allow for reaction time lag.</li> <li>• Expect the unexpected around every curve.</li> <li>• Don't drive when fatigued. Adhere to agency driving regulations and guidelines.</li> <li>• Review and adhere to the driving protocols in today's IAP.</li> </ul>	
H,L,M, O,Q,S, T,Y,Z	Heavy Equipment Operations	<ul style="list-style-type: none"> <li>• Ensure that communications are established with the operator. Radio Commo is Required!</li> <li>• Make positive eye contact with the operator before being requested to approach the equipment.</li> <li>• Maintain a 50' to 100' exclusion area around working equipment.</li> <li>• Use a spotter when backing, use qualified operators, and assign appropriate overhead.</li> </ul>	
ALL	Biting, Stinging Insects, & Critters	<ul style="list-style-type: none"> <li>• If allergic to bee stings, let your DIVS &amp; Medic/EMT's know.</li> <li>• <b>Leave wildlife alone. Backhaul ALL Trash please.</b></li> </ul>	
ALL	Complacency	<ul style="list-style-type: none"> <li>• <b>Maintain focus! The job isn't done till we're home with our families</b></li> <li>• Don't let your operations fall into the "routine" category.</li> <li>• Maintain situational awareness in all activities.</li> <li>• <b>The first step to an accident involves the false belief that experience makes you invulnerable.</b></li> </ul>	
INCIDENT NAME <b>South Complex</b> ICS 215a		DATE PREPARED: <p align="center"><b>September 5<sup>th</sup>, 2015</b></p>	OPERATIONAL PERIOD <b>Sunday, Day Shift</b> <b>9/6/2015, 0700 - 1900</b> Prepared by: Tanzi – SOF1, Barnhart – SOF2, Schwarm – SOF2(t)
		TIME PREPARED: <b>1930 HOURS</b>	

# LCES

LCES stands for lookout(s), communication(s), escape routes and safety zone(s). These are the same items stressed in the FIRE ORDERS and "Watchout" Situations. I prefer to look at them from a "systems" point of view, that is, as being interconnected and dependent on each other. It is not only important to evaluate each one of these items individually but also together they must be evaluated as a system. For example, the best safety zone is of no value if your escape route does not offer you timely access when needed.

A key concept - the LCES system is identified to each firefighter prior to when it must be used. The nature of wildland fire suppression dictates continuously evaluating and, when necessary, re-establishing LCES as time and fire growth progress. I want to take a minute and briefly review each component and its interconnection with the others.

Lookout(s) or scouts (roving lookouts) need to be in a position where both the objective hazard and the firefighter (s) can be seen. Lookouts must be trained to observe the wildland fire environment and to recognize and anticipate wildland fire behavior changes. Each situation determines the number of lookouts that are needed. Because of terrain, cover and fire size one lookout is normally not sufficient. The whole idea is when the objective hazard becomes a danger the lookout relays the information to the firefighter so they can reposition to the safety zone. Actually, each firefighter has the authority to warn others when they notice an objective hazard which becomes a threat to safety.

Communications(s) is the vehicle which delivers the message to the firefighters, alerting of the approaching hazard. As is stated in current training, communications must be prompt and clear. Radios are limited and at some point the warning is delivered by word of mouth. Although more difficult, it is important to maintain promptness and clearness when communication is by word of mouth.

Incident intelligence (regarding wildland fire environment, fire behavior and suppression operations) both to and from Incident Management (i.e. Command & General Staff) is of utmost importance. But I don't view this type of communication a normal component of the LCES system. Entrapment occurs on a fairly site-specific level. Incident intelligence is really used to alert of hazards (e.g.. "Watchout" situations) or to select strategical operations. LCES is primarily a Division function: responsibility should be here.

Escape Routes are the path the firefighter takes from their current locations, exposed to the danger, to an area free from danger. Notice that escape routes is used instead of escape route(s). Unlike the other components, there always must be more than one escape route available to the firefighter. Battlement Creek 1976 is a good example of why another route is needed between the firefighter's location and a safety zone.

Escape routes are probably the most elusive component of LCES. Their effectiveness changes continuously. As the firefighter works along the fire perimeter, fatigue and spatial separation increases the time required to reach the safety zone. The most common escape route (or part of an escape route) is the fireline. On indirect or parallel fireline, situations become compounded. Unless safety zones have been identified ahead, as well as behind, firefighters retreat may not be possible.

Safety Zone(s) are locations where the threatened firefighter may find refuge from the danger. Unfortunately shelter deployment sites have been incorrectly called safety zones. Safety zones should be conceptualized and planned as a location where no shelter is needed. This does not intend for the firefighter to hesitate to deploy their shelter if needed, just if a shelter is deployed the location is not a tree safety zone. Fireline intensity and safety zone topographic location determine safety zone effectiveness.

Again, a key concept - the LCES system is identified prior to when it must be used. That is lookouts must be posted with communications to each firefighter, and a minimum of two escape routes form the firefighter's work location to a safety zone (not a shelter deployment site) every time the firefighter is working around an objective hazard.

Safety and tactics should not be considered as separate entities. As with any task safety and technique necessarily should be integrated. The LCES system should be automatic in any tactical operation where an objective hazard is or could be present.

LCES is just a re-focusing on the essential elements of the FIRE ORDERS. The systems view stresses the importance of the components working together. The LCES system is a result of analyzing fatalities and near misses for over 20 years of active fireline suppression duties. I believe that all firefighters should be given an interconnecting view of Lookout(s), Communications(s), Escape routes and Safety zone(s).

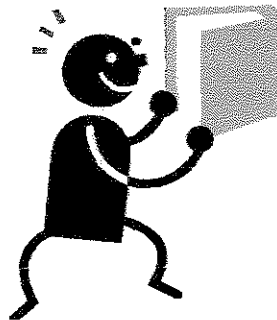
## TRAINING SPECIALIST MESSAGE

Remember:

An individual may not have more than six active position task books at one time.

No more than two of the six allowed position task books may be in a single functional area, including prescribed fire.

Task books expire 3 years from the date they are initiated, documentation of the first assignment resets that date.



**Make everything as simple as possible, but not simpler. -  
Albert Einstein**

## 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.*

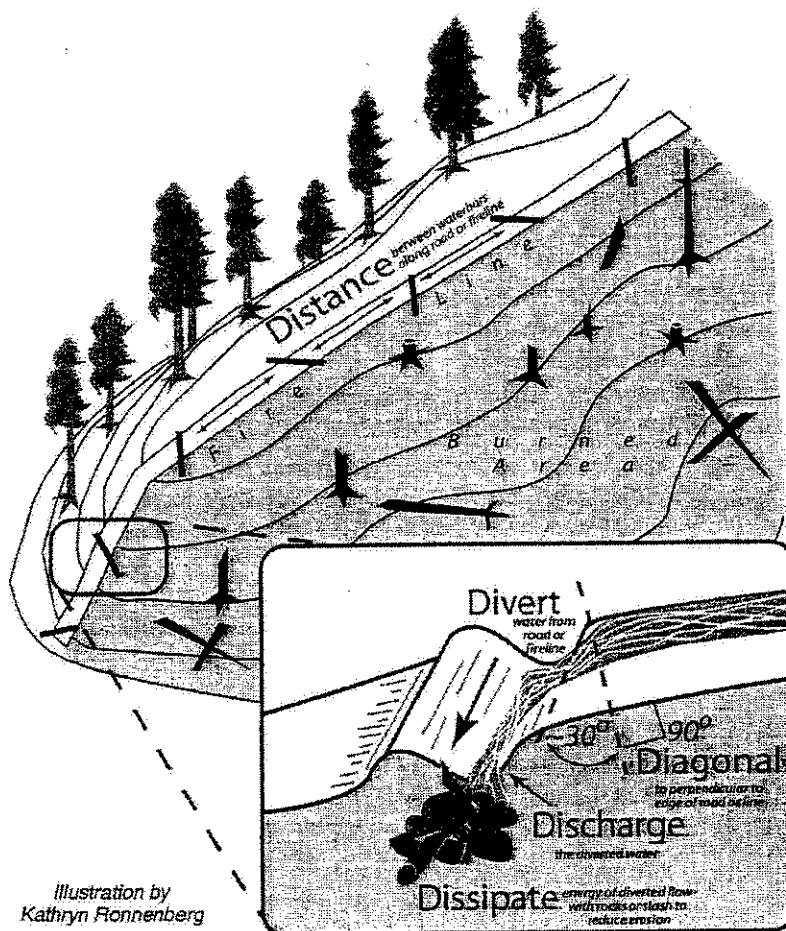
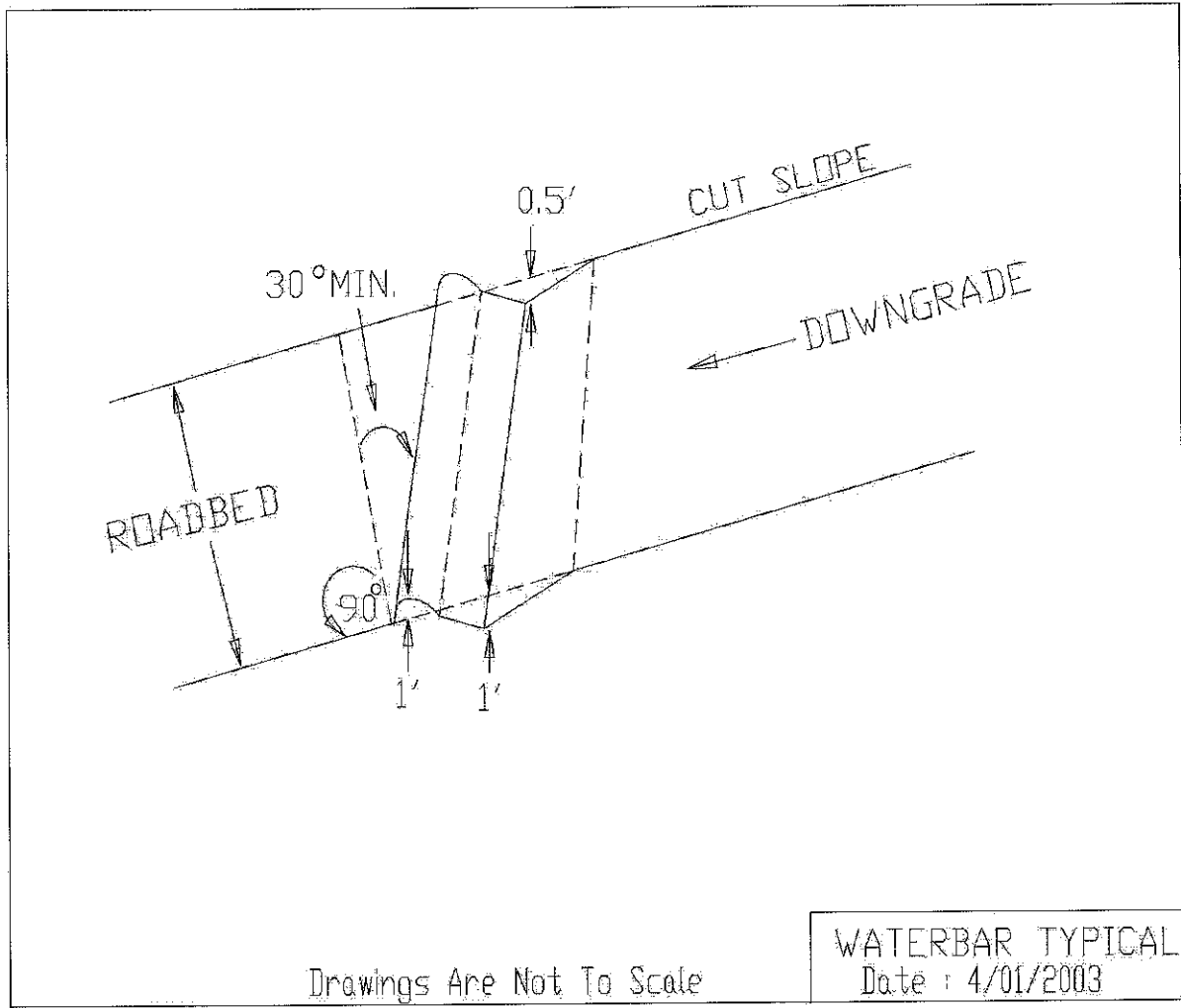


Illustration by  
Kathryn Flonenberg



**INCIDENT WATER USE LOG**

DATE	WATER SOURCE	QUANTITY	E NUMBER	DRIVER

**Use this log to track water use.**

Include the following information:

- Date water was received
- Water Source (Where you got the water)
- Gallons collected
- Resource Order number of resource collecting water
- Driver Name

**Return this form to FINANCE**

(Additional forms available in Finance)

