

**National Interagency Coordination Center
Incident Management Situation Report
Saturday, July 23, 2016 – 0530 MT
National Preparedness Level 2**

National Fire Activity

Initial attack activity: Moderate (203 new fires)
 New large incidents: 9
 Large fires contained: 1
 Uncontained large fires:** 18
 Area Command Teams Committed: 0
 NIMOs committed: 0
 Type 1 IMTs committed: 1
 Type 2 IMTs committed: 9
 **Uncontained large fires include only fires being managed under a full suppression strategy.
[Link](#) to Geographic Area daily reports.

Great Basin Area (PL 3)

New fires: 25
 New large incidents: 1
 Uncontained large fires: 7
 Type 2 IMTs committed: 2

Pioneer, Boise NF. IMT 2 (Rosenthal). Five miles north of Idaho City, ID. Timber and grass. Active fire behavior with group torching, short crown runs and spotting. Structures threatened. Road and area closures in effect.

Cliff Creek, Bridger-Teton NF. IMT 2 (DeMasters). Fifteen miles east of Hoback, WY. Timber. Moderate fire behavior with short crown runs and single tree torching. Numerous residences threatened. Evacuations, road, area and trail closures in effect.

Little Den, Carson City District, BLM. Forty-five miles southwest of Austin, NV. Timber, brush and grass. Active fire behavior with group torching and short crown runs. Sage-grouse habitat threatened.

Pinto, Ely District, BLM. Fifteen miles southeast of Eureka, NV. Timber, brush and grass. Active fire behavior with uphill runs, creeping and smoldering. Structures and sage-grouse habitat threatened.

* **California Trail**, Salt Lake Field Office, BLM. Thirty-six miles northwest of Tooele, UT. Grass. Active fire behavior with running, torching and spotting. Structures threatened.

Choke Cherry, Salt Lake Field Office, BLM. Ten miles southeast of Ibapah, UT. Timber and grass. Minimal fire behavior with isolated torching, creeping and smoldering. Sage-grouse habitat threatened.

MM14 Highway 21, Boise District, BLM. Started on county land three miles east of Boise, ID. Brush and short grass. Minimal fire behavior. Road, area and trail closures in effect.

Shooting Range, Storey County FD. Started on private land 15 miles east of Reno, NV. Closed timber litter and short grass. Minimal fire behavior.

Incident Name	Unit	Size		%	Ctn/ Comp	Est	Personnel		Resources			Strc Lost	\$\$ CTD	Origin Own
		Acres	Chge				Total	Chge	Crw	Eng	Heli			
Pioneer	ID-BOF	2,906	1,606	26	Ctn	7/30	388	88	13	3	8	0	2M	FS
Cliff Creek	WY-BTF	11,534	1,416	10	Comp	7/31	623	4	16	24	8	1	3.2M	FS

Incident Name	Unit	Size		%	Ctn/ Comp	Est	Personnel		Resources			Strc Lost	\$\$ CTD	Origin Own
		Acres	Chge				Total	Chge	Crw	Eng	Heli			
Little Den	NV-CCD	3,212	512	35	Ctn	7/25	339	114	10	6	3	0	800K	BLM
Pinto	NV-ELD	1,902	1,102	30	Ctn	7/27	131	18	4	6	1	0	300K	BLM
* California Trail	UT-SLD	813	---	65	Ctn	7/28	45	---	1	4	1	0	200K	BLM
Choke Cherry	UT-SLD	1,632	0	51	Ctn	7/30	35	-157	1	1	1	0	524K	BLM
MM14 Highway 21	ID-BOD	4,306	0	90	Ctn	7/23	189	-46	6	3	5	2	2M	CNTY
Shooting Range	NV-STOX	1,275	0	90	Ctn	7/23	41	-71	1	2	1	0	375K	PRI

Rocky Mountain (PL 3)

New fires: 24
New large incidents: 1
Uncontained large fires: 1
Type 2 IMTs Committed: 3

Lava Mountain, Shoshone NF. IMT 2 (Connell). Twenty miles northwest of Dubois, WY. Timber and heavy logging slash. Active fire behavior with group torching, wind-driven runs and short-range spotting. Numerous structures threatened. Evacuations, road and trail closures in effect.

* **Hatchery**, Washakie County. IMT 2 (Greer). Seven miles northeast of Ten Sleep, WY. Timber and brush. Extreme fire behavior with running, crowning and torching. Numerous structures threatened. Evacuations, road and area closures in effect.

Hayden Pass, Pike & San Isabel NF. Transfer of command from IMT 2 (Esperance) back to the local unit will occur today. Twenty miles southeast of Salida, CO. Timber, heavy logging slash and chaparral. Minimal fire behavior. Road, area and trail closures in effect.

Incident Name	Unit	Size		%	Ctn/ Comp	Est	Personnel		Resources			Strc Lost	\$\$ CTD	Origin Own
		Acres	Chge				Total	Chge	Crw	Eng	Heli			
Lava Mountain	WY-SHF	1,981	781	0	Comp	9/1	425	43	8	26	6	0	3.3M	FS
* Hatchery	WY-WAX	2,800	---	0	Ctn	8/22	85	---	1	7	3	0	10K	CNTY
Hayden Pass	CO-PSF	16,489	0	55	Comp	10/1	354	-116	6	10	4	1	8.4M	FS

Southern California Area (PL 3)

New fires: 18
New large incidents: 2
Uncontained large fires: 4
Type 1 IMTs committed: 1
Type 2 IMTs committed: 2

* **Sobranes**, San Benito-Monterey Unit, Cal Fire. Cal Fire IMT 1 (Derum). Seven miles northwest of Big Sur, CA. Timber, chaparral and tall grass. Active fire behavior with wind-driven runs, flanking and backing. Communities of Palo Colorado and northern Big Sur threatened. Area and trail closures in effect.

* **Sand**, Angeles NF. IMT 2 (Wakoski). Eight miles east of Santa Clarita, CA. Brush and tall grass. Extreme fire behavior with running and spotting. Numerous residences threatened. Evacuations in effect.

Roblar, Camp Pendleton Marine Corps Base, DOD. IMT 2 (Kelly). Seven miles northwest of Fallbrook, CA. Chaparral and tall grass. Moderate fire behavior with isolated torching and creeping.

Spring, Sierra NF. Seventeen miles south of Mammoth Lakes, CA. Timber and brush. Moderate fire behavior with single tree torching. Road and trail closures in effect.

Incident Name	Unit	Size		%	Ctn/ Comp	Est	Personnel		Resources			Strc Lost	\$\$ CTD	Origin Own
		Acres	Chge				Total	Chge	Crw	Eng	Heli			
* Sobranes	CA-BEU	1,000	---	0	Ctn	7/29	124	---	5	11	4	0	500K	ST
* Sand	CA-ANF	3,327	---	0	Ctn	7/29	302	---	14	21	7	0	500K	FS
Roblar	CA-MCP	800	300	35	Ctn	7/26	342	0	10	36	8	0	1.5M	DOD
Spring	CA-SNF	179	5	95	Ctn	7/25	62	0	2	1	0	0	495K	FS

Southwest Area (PL 3)

New fires: 34
 New large incidents: 1
 Uncontained large fires: 1
 Type 2 IMTs committed: 1

Fuller, Grand Canyon NP. IMT 2 (Sinclair). Four miles northeast of North Rim, AZ. Timber and medium logging slash. Minimal fire behavior. Road, area and trail closures in effect. Precipitation occurred over the fire area yesterday.

Marsh, Las Vegas District, New Mexico State Forestry. Started on private land 10 miles east of Watrous, NM. Timber and tall grass. Active fire behavior with group torching and spotting. Residences threatened. Reduction in acreage due to more accurate mapping.

Incident Name	Unit	Size		%	Ctn/ Comp	Est	Personnel		Resources			Strc Lost	\$\$ CTD	Origin Own
		Acres	Chge				Total	Chge	Crw	Eng	Heli			
Fuller	AZ-GCP	14,396	48	65	Comp	11/1	405	-97	7	10	5	0	6.3M	NPS
Marsh	NM-N4S	2,600	-400	65	Ctn	7/25	54	0	0	12	0	0	80K	PRI
* Three Hills	AZ-BAR	1,624	---	100	Ctn	---	0	---	0	0	0	0	25K	FWS

BAR – Buenos Aires National Wildlife Refuge, FWS

Alaska Area (PL 2)

New fires: 3
 New large incidents: 0
 Uncontained large fires: 1
 Type 2 IMTs committed: 1

McHugh, Mat-Su Area Forestry, DOF. IMT 2 (Kurth). Two miles southeast of Anchorage, AK. Medium logging slash. Minimal fire behavior. Numerous residences threatened. Area and trail closures in effect. Precipitation occurred over the fire area yesterday. Reduction in acreage due to more accurate mapping.

Tok River, Tok Area Forestry, DOF. Started on native corporation land seven miles south of Tok, AK. Timber, light logging slash and grass. Minimal fire behavior. Structures threatened. Precipitation occurred over the fire area yesterday.

Iniakuk Lake, Tanana Zone, BLM. Previously reported incident. Started on state land 40 miles northwest of Bettles, AK. Timber and grass. Minimal fire behavior. Structures threatened. Precipitation occurred over the fire area yesterday. Last report unless significant activity occurs.

Mauneluk River 2, Galena Zone, BLM. Previously reported incident. Started on BIA land 26 miles northeast of Kobuk, AK. Timber and grass. Minimal fire behavior. Residences threatened. Last report unless significant activity occurs.

Timber Creek, Southwest Area Forestry, DOF. Previously reported incident. Twenty-seven miles south of Chuathbaluk, AK. Timber and grass. Minimal fire behavior. Last report unless significant activity occurs.

George River, Southwest Area Forestry, DOF. Previously reported incident. Started on native corporation land 16 miles northwest of Red Devil, AK. Timber. Minimal fire behavior. Last report unless significant activity occurs.

Incident Name	Unit	Size		%	Ctn/Comp	Est	Personnel		Resources			Strc Lost	\$\$ CTD	Origin Own
		Acres	Chge				Total	Chge	Crw	Eng	Heli			
McHugh	AK-MSS	815	-27	14	Comp	8/1	338	15	8	17	3	0	2.1M	ST
Tok River	AK-TAS	731	0	75	Ctn	7/23	138	-1	6	0	1	0	905K	ANC
Iniakuk Lake	AK-TAD	34,482	4,580	0	Comp	7/27	28	0	1	0	1	0	1.4M	ST
Mauneluk River 2	AK-GAD	30,123	28,767	0	Comp	8/31	4	0	0	0	0	0	NR	BIA
Timber Creek	AK-SWS	9,411	8,411	0	Comp	7/31	0	0	0	0	0	0	7K	ST
George River	AK-SWS	3,733	2,875	0	Comp	7/31	0	0	0	0	0	0	106K	ANC

Northern Rockies Area (PL 2)

New fires: 13
 New large incidents: 3
 Uncontained large fires: 2

* **Blue Lake**, Central Land Office, DNRC. Started on BLM land 10 miles southwest of Ennis, MT. Timber and brush. Active fire behavior with running, torching and spotting. Residences threatened. Road and trail closures in effect.

* **Fritz**, Yellowstone County. Ten miles southwest of Billings, MT. Timber, brush and grass. Active fire behavior with wind-driven runs and spotting. Structures threatened. Evacuations, road, area and trail closures in effect.

* **Cedar**, Nez Perce-Clearwater NF. Eleven miles south of Powell, ID. Timber. Moderate fire behavior with short crown runs, spotting and flanking. Trail closure in effect. Last report unless significant activity occurs.

Incident Name	Unit	Size		%	Ctn/Comp	Est	Personnel		Resources			Strc Lost	\$\$ CTD	Origin Own
		Acres	Chge				Total	Chge	Crw	Eng	Heli			
* Blue Lake	MT-CES	390	---	0	Ctn	8/4	112	---	3	4	2	0	150K	BLM
* Fritz	MT-LG03	700	---	9	Ctn	7/26	59	---	0	15	1	0	200K	CNTY
* Cedar	ID-NCF	186	---	0	Comp	10/31	1	---	0	0	0	0	5K	FS

Northwest Area (PL 1)

New fires: 29
 New large incidents: 1
 Uncontained large fires: 1

* **0353 RN Scott Canyon**, Prineville District, BLM. Twenty miles east of Wasco, OR. Brush and grass. Active fire behavior with wind-driven runs and flanking.

Incident Name	Unit	Size		%	Ctn/ Comp	Est	Personnel		Resources			Strc Lost	\$\$ CTD	Origin Own
		Acres	Chge				Total	Chge	Crw	Eng	Heli			
* 0353 RN Scott Canyon	OR-PRD	29,190	---	7	Ctn	7/25	80	---	2	9	3	0	150K	BLM

Southern Area (PL 2)

New fires: 20
 New large incidents: 0
 Uncontained large fires: 1

Taylor, National Forests in Florida. Nine miles northeast of Sanderson, FL. Southern rough. Minimal fire behavior. Last report unless significant activity occurs.

Incident Name	Unit	Size		%	Ctn/ Comp	Est	Personnel		Resources			Strc Lost	\$\$ CTD	Origin Own
		Acres	Chge				Total	Chge	Crw	Eng	Heli			
Taylor	FL-FNF	880	0	80	Ctn	UNK	26	9	0	1	1	0	267K	FS

Active Incident Resource Summary						
GACC	Fires	Cumulative Acres	Crews	Engines	Helicopters	Total Personnel
AICC	13	121,824	19	21	8	654
NWCC	1	29,190	2	9	3	80
ONCC	0	0	0	0	0	0
OSCC	6	7,951	32	71	21	879
NRCC	7	3,702	4	40	5	299
GBCC	15	33,299	56	62	31	1,963
SWCC	17	45,235	13	37	7	680
RMCC	15	67,267	28	72	20	1,414
EACC	0	0	0	0	0	0
SACC	8	4,200	3	5	2	131
Total	82	312,668	157	317	97	6,100

Fires and Acres Yesterday (by Protection):

Area		BIA	BLM	FWS	NPS	ST/OT	USFS	TOTAL
Alaska Area	FIRES	0	1	0	0	2	0	3
	ACRES	0	0	0	0	2	0	2
Northwest Area	FIRES	5	2	0	5	8	9	29
	ACRES	5	29,150	0	0	5	0	29,160
Northern California Area	FIRES	0	0	0	0	23	7	30
	ACRES	0	0	0	0	68	8	76
Southern California Area	FIRES	0	1	0	0	15	2	18
	ACRES	0	2	0	0	140	7	149
Northern Rockies Area	FIRES	0	0	0	0	13	0	13
	ACRES	0	0	0	0	1,771	0	1,771
Great Basin Area	FIRES	0	9	0	0	6	10	25
	ACRES	0	3,317	0	0	4	17	3,338
Southwest Area	FIRES	2	3	1	0	8	20	34
	ACRES	190	1	1,619	0	155	148	2,113
Rocky Mountain Area	FIRES	0	8	0	0	9	7	24
	ACRES	0	100	0	0	118	3,615	3,833
Eastern Area	FIRES	0	0	0	0	5	2	7
	ACRES	0	0	0	0	103	0	103
Southern Area	FIRES	0	0	0	0	20	0	20
	ACRES	0	0	0	0	146	0	146
TOTAL FIRES:		7	24	1	5	109	57	203
TOTAL ACRES:		195	32,570	1,619	0	2,512	3,795	40,691

Fires and Acres Year-to-Date (by Protection):

Area		BIA	BLM	FWS	NPS	ST/OT	USFS	TOTAL
Alaska Area	FIRES	0	176	0	0	326	10	512
	ACRES	0	347,992	0	0	103,567	3	451,562
Northwest Area	FIRES	178	78	20	13	690	273	1,252
	ACRES	2,784	67,834	147	1	4,128	907	75,801
Northern California Area	FIRES	68	5	0	20	1,391	205	1,689
	ACRES	124	11	0	3	20,971	8,642	29,751
Southern California Area	FIRES	11	51	4	22	1,857	215	2,160
	ACRES	8	26,018	269	25	19,484	47,681	93,485
Northern Rockies Area	FIRES	484	49	8	6	678	148	1,373
	ACRES	3,331	2,185	1,402	3	14,358	2,771	24,050
Great Basin Area	FIRES	12	347	5	23	349	208	944
	ACRES	16	131,001	3	23	39,963	20,642	191,648
Southwest Area	FIRES	535	177	9	38	726	665	2,150
	ACRES	15,098	65,471	6,875	31,721	98,769	219,163	437,097
Rocky Mountain Area	FIRES	478	217	10	13	663	264	1,645
	ACRES	1,639	14,821	480	1,441	460,428	46,823	525,632
Eastern Area	FIRES	490	0	25	19	4,958	345	5,837
	ACRES	1,906	0	1,087	910	30,267	7,111	41,281
Southern Area	FIRES	325	0	18	54	13,048	418	13,863
	ACRES	132,673	0	128	27,567	857,210	42,417	1,059,995
TOTAL FIRES:		2,581	1,100	99	208	24,686	2,751	31,425
TOTAL ACRES:		157,579	655,333	10,391	61,694	1,649,145	396,160	2,930,302

Ten Year Average Fires (2006 – 2015 as of today)	43,106
Ten Year Average Acres (2006 – 2015 as of today)	3,614,511

Prescribed Fires and Acres Yesterday (by Ownership):

Area		BIA	BLM	FWS	NPS	ST/OT	USFS	TOTAL
Alaska Area	FIRES	0	0	0	0	0	0	0
	ACRES	0	0	0	0	0	0	0
Northwest Area	FIRES	0	0	0	0	0	0	0
	ACRES	0	0	0	0	0	0	0
Northern California Area	FIRES	0	0	0	0	0	0	0
	ACRES	0	0	0	0	0	0	0
Southern California Area	FIRES	0	0	0	0	0	0	0
	ACRES	0	0	0	0	0	0	0
Northern Rockies Area	FIRES	0	0	0	0	0	0	0
	ACRES	0	0	0	0	0	0	0
Great Basin Area	FIRES	0	0	0	0	0	0	0
	ACRES	0	0	0	0	0	0	0
Southwest Area	FIRES	0	0	0	0	0	0	0
	ACRES	0	0	0	0	0	0	0
Rocky Mountain Area	FIRES	0	0	0	0	0	0	0
	ACRES	0	0	0	0	0	0	0
Eastern Area	FIRES	0	0	0	0	0	0	0
	ACRES	0	0	0	0	0	0	0
Southern Area	FIRES	0	0	0	0	24	0	24
	ACRES	0	0	0	0	334	0	334
TOTAL FIRES:		0	0	0	0	24	0	24
TOTAL ACRES:		0	0	0	0	334	0	334

Prescribed Fires and Acres Year-to-Date (by Ownership):

Area		BIA	BLM	FWS	NPS	ST/OT	USFS	TOTAL
Alaska Area	FIRES	0	7	0	0	2	1	10
	ACRES	0	31,664	0	0	1,566	38	33,268
Northwest Area	FIRES	8	21	6	0	0	149	184
	ACRES	4,752	1,990	356	0	0	23,858	30,956
Northern California Area	FIRES	4	1	9	8	0	125	147
	ACRES	41	90	3,356	328	0	8,244	12,059
Southern California Area	FIRES	0	5	4	1	0	136	146
	ACRES	0	71	422	760	0	3,587	4,840
Northern Rockies Area	FIRES	12	12	53	11	14	149	251
	ACRES	5,316	4,358	12,318	651	698	14,894	38,235
Great Basin Area	FIRES	4	23	6	5	36	73	147
	ACRES	110	2,296	3,584	128	915	25,780	32,813
Southwest Area	FIRES	8	30	3	8	1	103	153
	ACRES	894	22,071	92	2,331	2	62,524	87,914
Rocky Mountain Area	FIRES	15	33	57	24	76	69	274
	ACRES	1,266	2,908	26,221	10,952	4,482	27,771	73,600
Eastern Area	FIRES	46	0	347	23	891	180	1,487
	ACRES	45,655	0	50,823	5,774	61,229	56,090	219,571
Southern Area	FIRES	16	0	179	65	9,910	907	11,077
	ACRES	1,615	0	159,638	51,546	664,872	829,043	1,706,714
TOTAL FIRES:		113	132	664	145	10,930	1,892	13,876
TOTAL ACRES:		59,649	65,448	256,810	72,470	733,764	1,051,829	2,239,970

*** Changes in some agency YTD acres reflect more accurate mapping or reporting adjustments. ***

Additional wildfire information is available through the Geographic Areas at <http://gacc.nifc.gov/>

Canada Fires and Hectares

PROVINCES	FIRES YESTERDAY	HECTARES YESTERDAY	FIRES YEAR-TO-DATE	HECTARES YEAR-TO-DATE
BRITISH COLUMBIA	13	0	556	93,606
YUKON TERRITORY	0	0	43	16,366
ALBERTA	1	2	1,051	610,517
NORTHWEST TERRITORY	0	23,774	160	168,962
SASKATCHEWAN	0	3	327	154,081
MANITOBA	4	24	174	33,823
ONTARIO	16	265	416	86,656
QUEBEC	1	17	451	25,925
NEWFOUNDLAND	2	0	73	10,957
NEW BRUNSWICK	0	0	236	236
NOVA SCOTIA	0	0	205	336
PRINCE EDWARD ISLAND	0	0	6	19
NATIONAL PARKS	0	0	41	5,540
TOTALS	37	24,085	3,739	1,207,024

* 1 Hectare = 2.47 Acres

Predictive Services Discussion: High pressure will continue to dominate the pattern across most of the U.S. A small trough will move across southern Canada, bringing cooler air to most of the northwestern quarter of the U.S. Scattered thunderstorms will develop over the Four Corners region in moisture trapped under the upper ridge. Strong thunderstorms will move from the northern Rockies to the Great Lakes region ahead of the upper trough. In the East, scattered showers and thunderstorms will form in the afternoon. Conditions will remain very hot across most of the country with mild to warm weather in the northern tier of states. In Alaska, scattered showers and a few thunderstorms will develop across the south. Temperatures will continue mild but begin a slow warmup.

<http://www.predictiveservices.nifc.gov/outlooks/outlooks.htm>



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?

Helicopter Accident – Elk Fire, California – July 23rd 2007

Incident Summary: A

handcrew is assigned to mop up on the Elk Complex. The crew's superintendent requests blivets through the division supervisor (DIVS) to support the operation. A medium helicopter will longline the blivets.

Two days before the accident - The DIVS anchors a fluorescent panel to the ground (used for indicating landing and drop zones) for the handcrew to use. The terrain in the area contains steep slopes and trees from 75 to 200 feet tall.

Day before the accident - The crew prepares for blivet delivery. The location of the panel remains as placed by the DIVS. The helicopter makes the blivet drop close to the panel. The crew member who is marshaling warns the pilot about the proximity of one tree located to the right and upslope. Concerned with their own safety, two ground crew members distance themselves from the blivet drop. The division safety officer visits the site after the blivet delivery. There was no discussion regarding the drop zone location or recognized hazards. At the After Action Review (AAR) in camp that evening, there is no mention of it. Additional blivets and back haul are requested by the crew superintendent through the DIVS for the following day.

Day of the accident - The pilot is informed that he would be delivering more blivets to the same drop zone. Two crew members, not the same from the previous day, staff the drop site. The panel remains in the same location as the previous day. Though the helicopter is equipped with a 150ft longline, the marshaller communicates with the DIVS that a longer longline is recommended. By the time the recommendation is transmitted to the helibase, the helicopter is enroute with blivets. Due to radio traffic, the marshaller and pilot did not communicate until the helicopter is on final approach to the drop site. Crew members witness the helicopter drift right as the blivets were set down, and the main rotor striking the tall tree.

The longline and the blivets remain attached as the helicopter turns left and flies downhill impacting trees as it falls to the ground. The helicopter is destroyed. Though crew members attempt to provide assistance, the pilot is killed.

Lessons Learned Discussion Points

Lookouts – In medium helicopters many pilots fly external load missions from the left seat, leaning left out the bubble window. This decreases the pilots ability to see to the right of the aircraft. As ground personnel working with helicopters, you may have a view of hazards that the pilot does not.

- *If you are giving a new pilot a briefing about hazards in **your** area, what will your emphasis points be?*

Communications – During a post-accident interview two crew members stated that they were so concerned about the potential for an accident that they briefed each other three times on what action would be taken in the event of an accident.

- *Discuss some of the reasons that people do not speak up when they see something wrong.*
- *During your work today, you may only get one chance to communicate a hazard before an accident happens. Identify how you and your crew will combat the reluctance to verbalize hazards.*

There was a wider open spot down the line a short ways that would have made a better drop site, but the DIVS had placed the panel in a convenient spot for the crews and did not communicate that he did not intend it to be the drop site for the blivets.

- *Discuss how your crew leader wants crew members to speak up with questions, ideas and solutions.*

Escape Routes – We strive to work as safe as possible, but when things go wrong we need a way out. Just as with fire and felling, pilots in aircraft and the ground crews working with them need to establish escape routes for the aircraft and the ground crew.

Safety Circle - The helicopter's main rotor impacted the top 15 feet of a 165ft tree. This means the helicopter's safety circle was not big enough to remain clear of hazards. (A safety circle is generally recognized as 1 ½ times the rotor diameter and are used for keeping a safe distance from hazards both on the ground and in flight).

- *Using your IRPG, identify the minimum size of a safety circle for a medium helicopter.*
- *What are some ways to estimate the height of a tree?*
- *What are some options you have as a ground crew to improve a drop site with a hazardous tree?*
- *What are some options you have as a ground crew if you have an unsafe condition at the drop site and the helicopter is enroute?*
- *What immediate actions do you take as a ground crew at a drop site if the helicopter is getting too close to a hazard?*
- *Could asking the pilot to do a recon of the drop site have potentially changed the outcome of this accident?*