After Action Review Summary

Medical Emergency
Respiratory Duress Short Haul
Incident within the Incident

Interagency Incident Management Team
Nor Cal 1

Overview

August 1, 2013, the Northern California IMT 1 (NorCal1) was assigned to the Green Ridge Incident on the Sisters Ranger District, Deschutes National Forest, NorCal 1 was briefed on August 2, 2013 at 1300. The IMT took command of the Green Ridge incident the following day, August 03, 2013, at 0600. The Green Ridge fire started by lightening on July 31, 2013 and was being managed by a local Type 3 organization. The fire burned in steep, rugged terrain. The fuels consisted of Ponderosa Pine and Mixed True Fir with areas of heavy down fuels components. Weather conditions included increasing temperatures, decreasing minimum relative humidity, and continuing threat of thunderstorms. As of publication of this summary, the fire was not contained and had reached 420 acres and was staffed by 382 personnel.

On August 3, 2013 the safety portion of the Incident Briefings highlighted the Medical Plan (Attachment A) and the IMT's Injury/Accident Incident Communications Protocol (Attachment B) in the IAP. Air Operations of the Green Ridge Incident ordered a National Park Service (NPS) Type 2 Helicopter with short haul capabilities. That helicopter arrived later that same day. After feed back from local resources NorCal1 determined that local resources' unfamiliarity with the Injury/Accident Incident Communications Protocol could possibly lead to confusion. It was decided that future Incident Action Plans (IAP) would contain the more familiar "Medical 9 Line" information (Attachment C). While different, the "9 line" met the Dutch Creek Protocols and would provide better serviceability to the assigned resources. On August 4, 2013 the IAP contained the "9 Line" form and the change was extensively communicated during all briefings that day The NorCal1 team regularly performs training and drills of managing an "Incident within the Incident". NorCal1 uses the Injury/Accident Incident Communications Protocol (Attachment B). This includes needed changes which are incident specific. Effected team members were provided the "9 Line" form for familiarity and were informed that incident specific information would only be on block 8 of the ICS form 206 (attachment A).

The Incident

On August 04, 2013 the Green Ridge Incident was divided into 4 Divisions and staffed with team Division/Groups Supervisors (DIVS) denoted as "A", "B", "Y", and "Z". Tactics included direct and indirect attack line construction on all divisions followed by hose lays and burnout as appropriate. Division "A" was staffed with three type 2IA handcrews and one type 1 Handcrew. In addition, one line paramedic was on the fire. That evening a crewmember of one of the handcrews communicated, through his crew's chain of command, difficulty breathing after inhaling hot smoke while working a spot fire.

The Response

On July 04, 2013 at approximately 17:44 DIVS "A" contacted Communications declaring an Emergency Medical Transport involving a crewmember having difficulty breathing. The Division/Group Supervisor requested a ground ambulance to rendezvous with the patient at a drop point. A fireline EMT from the same crew was present and the "9 Line" protocol was followed, indicating a level of severity of red. Within five minutes a local area Advanced Life Support ambulance was en-route to the designated drop point with a 20 minute ETA.

At 17:50 Division "A" contacted communication and indicated that the patient's breathing had deteriorated and requested a short-haul extraction of the patient. At this point IMT Safety Officers and Medical Unit Leader initiated an Air Ambulance to meet with the NPS Helicopter 28HJ. At the same time a second local ground ambulance also responded. At 18:01 the communication channel was cleared of all non emergency traffic. At approximately 18:05 NorCal1's wheeled Stokes litter began down the fireline in case air extraction got foiled by smoke. Due to fire behavior the Stokes was unable to be delivered and had to retreat and reassess access. At 18:07 first contact between Divs "A" and the short-haul helicopter was achieved. The helicopter re-conned the extraction area as part of its risk assessment process. Shortly after, one of the ground ambulances started to the incident heli-base to meet with the extraction helicopter. By 18:17 the short-haul medics were on scene assessing the patient. At 18:24 the patient and medics were short-hauled to the helibase, arriving less than 5 minutes later and one minute before the air ambulance landed. After being assessed by the ALS ambulance it was determined to transport to the local hospital facilities, by ground, which occurred at 18:38. At this time all other medical response resources required by the operation were released. The communication channel was then opened to all traffic. In less than 5 minutes helicopter 28HJ was configured for bucket work and was supporting the firefighting effort. The patient was treated and released late the same night and was returned to the incident base. While speed is never emphasized, the total time from initial call by the DIVS "A" for a short-haul to getting the patient to ALS was 48 minutes.

Lessons learned

Planning for an "Incident within an Incident" is an important and necessary part of any team assignment. Practicing the plan with resources not normally assigned to the team (especially RADO and key unit leaders) is critical for a successful outcome.

Having incident aircraft to perform these missions should be standard, as availability and flight times of more traditional medical response partners cannot be controlled by the Incident. The ability of these aircraft to perform multiple mission types gives managers an additional cost effective tool without having specialized aircraft sitting idle.

Well planned ground extraction plans can be ineffective due to un-controllable environmental factors. In this case the wheeled Stokes litter was available on the line and attempts were made to deploy it, however fire behavior delayed it until it was no longer viable.

While in this case the patient was returned quickly to their crew, had this incident been even more severe, saving just one life is worth the investment of the entire National Helicopter Extraction Program. Reluctance to establishing a Helicopter Extraction Program is a short sighted approach for any agency that claims to be a High Reliability Organization.

Having high quality Advanced Life Support on the fireline and a Medical Incident Facility are invaluable for both decreasing the response times and increasing the level of care. In addition, significant cost savings are achieved by avoiding some hospital admissions and associated follow-up. In this case the local EMS were exceptionally supportive, efficient, and greatly contributed to the successful outcome of this incident.

To the extent possible all communications and air operations coordination should be conducted by incident personnel and not local dispatch centers. While all dispatch centers are highly effective and competent, often times having two communications groups leads to confusion over roles and responsibilities. During emergency declarations on an incident, radio discipline is essential to maintain mission integrity.

As the Agencies look at "Golden Hour" strategies, careful consideration should be given to strategies to achieve the shortest possible patient transportation times to avoid being set up for organizational failure.

MEDICAL PLAN	1. Incident Name **Cascade Division Complex**	2. Date Prepared 08/03/13	3. Time Prepared 1900	4. Operational Period 08/04/13 Day Shift

5. Incident Medical Aid Station

Medical Aid Stations	Location	Paramedics Yes	Paramedics No
ICP N 44°17.52 / W 121°34.27	Sisters middle school, 15200 McKenzie Hwy.		**X**

6. Transportation

AIR Ambulance Services

Name	Location	Phone	Paramedics Yes	Paramedics No
Air Link Day/Night	Bend, OR	911 or 800-621-5433	**X**	
Life Flight Day/Night	La Grande, OR	911 or 800-232-0911	**X**	
H-28HJ (short haul) Day only	Assigned to incident	Contact Cascades Comm.	**X**	
Air National Guard(Hoist) Day/Night	Roseburg, OR	Contact Cascades Comm.	**X**	

Ground Ambulance Services

Name	Location	Phone	Paramedics Yes	Paramedics No
Sisters – Camp Sherman Fire & Rescue	Sisters, OR	Ph: 541-549-0771	**X**	
Redmond Fire & Rescue	Redmond, OR	Ph: 541-504-5000	**X**	
Black Buttes Fire & Rescue	Black Butte Ranch	Ph: 541-595-2288	**X**	

7. Hospitals

Name	Address	Travel Time Air	Travel Time Ground	Phone	Helipad Yes	Helipad No	Burn Center Yes	Burn Center No
St. Charles - Bend	2500 NE Neff Road, Bend, OR N 44° 04.10 / W 121° 16.05	9 min.	45 min.	541-706-5816	**X**			**X**
St Charles - Redmond	1253 Nw Canal Blvd, Redmond,OR N 44° 17.26 / W 121° 10.12	10 min.	45 min.	541-548-8131	**X**			**X**
OHSU	3181 S.W. Sam Jackson Park Rd.Prtlnd N45° 29.98 / W 122° 41.12	40 min.	5 hrs.	503-494-8311	**X**			**X**
Lagacy Emanuel Burn / Trauma L-2	2801 N. Gantenbein Ave, Portland N45° 32.573 / W 122° 40.153	40 min.	5 hrs.	503-413-4232 503-413-2100	**X**		**X**	

8. Medical Emergency Procedures

- ❑ Contact Cascades communications (Day) or Central Oregon dispatch (Night) and declare a medical emergency on Command, advising your location and situation
- ❑ The closest Division Supervisor or designee will respond to the location to take control and direct actions.
- ❑ The closest Safety Officer and EMTs will respond to the location to assist with patient care
- ❑ Use the attached “9 line” worksheet to coordinate appropriate care and transportation
- ❑ If air or ground ambulance is delayed, designate rendezvous point and transport patient to rendezvous
- ❑ Secure the scene area and identify witnesses for later investigation – Keep a log

Medivac Sites: Sisters airport: N44° 17.04 / W 121° 32.04
Metolius Helibase: N44° 29.383/ W121°38.733

Prepared by (Medical Unit Leader)	10. Reviewed by (Safety Officer)
Josh Ramey 530-277-1213	Michele Tanzi

Injury or Incident Communications Protocol

Declare: Medical Emergency or Non-emergency Medical transport

Best transport method: Ambulance Helicopter Vehicle

Location_____ Lat:_____ Long:_____ Elevation:

.

Situation_____

Any special equipment required_____

Number of injured _____ Type of injuries_____

Closest pick up point (DP, Helispot)_____

LOC_____ Resp._____ Pulse _____ BP _____ Weight _____

Injury_____

Medical History/Allergies _____

Air Transportation Triage

	Air Ambulance	Ground Transport
Mechanism	Struck by tree Fall of 10' or more Snake bite with pain and swelling 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
Area Injured	Significant Blunt or Penetrating Trauma to Head, Neck, Chest, Abdomen or pelvis Any Arm or Leg fracture	Minor blunt trauma Minor penetrating trauma Extremity sprains and strains
Symptoms	Disoriented Chest Pain or Shortness of Breath Weak or absent radial pulse Pale, cold and sweating	Alert and oriented No shortness of breath Good pulses

Medivac Sites

Sisters airport : - N 44°17.04 / W 121°32.04

If air or ground ambulance is DELAYED:

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

If Declaring an "Incident within the Incident"

The closest DIVS or designee 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.

Medical - 9 Line Information

Date: _____ **Time:** _____ **Division:** _____

Line	Information	Notes:
1.	**Level of Severity:** ☐ RED – (Airway obstruction, Difficulty breathing, Major blood loss Cardiac chest pain, Crush injury to the chest, Penetrated object, Open fracture, 2° or 3° burn more than 4 palm sizes) ☐ YELLOW – (Closed fracture, Significant trauma; Lacerations and bleeding not controlled by direct pressure, Not able to walk, 2° or 3° burn, no more than 1 or 2 palm size) ☐ GREEN – (Small area abrasions or lacerations, bleeding controlled by pressure, Minor sprain, General sickness)	*Triage Page 48, IRPG – 2010* *Code 3 ALS Ambulance or Medivac Helicopter. Medical radio traffic has priority Emergency radio traffic restricted to: On site Medic, Div. Sup. or on scene IC.* *Ambulance or consider air transport if at remote location. Medical radio traffic may have priority as above.* *MEDICAL TRANSPORT via crew, ground support, field medic, or air if at remote location. Fire radio traffic unchanged.*
2.	**Patient Assessment / Injuries & Treatment:** Patient #1 - _____ Patient #2 - _____	*Assessment Page 42, IRPG – 2010* *Treatment Page 41,43-47* • *Level of Consciousness* • *Breathing Rate* • *Pulse Rate* • *Skin Condition – Pink or Pale, Warm or Cold* *Injury:* *Bleeding, Fracture, Head Injury, Eye, Heat, Burns, Bee Sting*
3.	**Patient Location:** Lat: ____° ____. ____', Long: ____° ____. ____'	*Drop Point, Staging area, Division, Spike Camp, Line area or GPS*
4.	**Additional Equipment or Medic Needed:**	*Hoist, SKED, Backboard, Litter, Rope, Paramedic, Trauma Bag, O_2, AED*
5.	**On Scene Medic and IC:**	*Crew medic, Field medic* *Who is the IC for this incident?*
6.	**Operational Channel:** Command _____ Tactical_____ EMS Helicopter contact Air Guard - RX 168.625 TX 168.625 TX Tone 110.9	*What frequency or channel will the incident be run on?*
7.	**LZ Location / GPS** Lat: ____° ____ . ____' Long: ____° ____ . ____' Ground Contact: _____	*LZ Area Selection Page 57, IRPG - 2010* *Set GPS on WGS-84* *Use Degrees, Minutes and Tenths of Minutes* *(Lat 00° 00.00' - Long 000° 00.00')*
8.	**LZ Special Hazards:**	*Trees, power lines, wind direction, slope*
9.	**Patient Affiliation:**	*Agency, Contractor, Military*

Revised – 07/15/2012 SO

Attachment C