"The Resilient Team" - Wildland Fire Leadership Campaign

Ruby Mountain IHC

Submission for the “Ignite the Spark For Leadership” Contest
The Ruby Mountain Hotshot crew was established in Elko, Nevada in 2001. Throughout the last 14 years the crew and its overhead have strived to continually improve in all aspects of fire suppression and management. Safety and leadership are constantly at the forefront of what we do as a crew, leading us to repeatedly analyze these aspects looking for areas of improvement.

During the winter of 2013/2014 the crew was challenged by Pam McDonald and Paul Hohn from the Wildland Fire Leadership Development program to enter the “Ignite the Spark for Leadership” contest. As a crew we decided to accept this challenge and fully incorporate it into our 2014 fire season. A lot of our submissions are exercises that we do on a yearly basis, or are aspects of our daily work that we incorporate in order to facilitate safety and leadership into the crew.

Entering into this contest has allowed us to further analyze our yearly exercises and view them from a leadership and team building stand point, as well as devise many new useful activities that promote training, leadership and commitment throughout the crew. Hopefully these exercises will be as useful throughout the fire community as they were for our crew.
Before the start of every fire season the Ruby Mountain Hotshot organization plans an elaborate “real life” fireline medical scenario. The idea of the scenario is to simulate a medical situation that will involve assessment through the crew EMT’s, the establishment of “an incident within an incident”, and rapid transport of critical patients for medical evacuation. Each year the simulation is different with the intent of refreshing the crew on proper procedures for medical emergencies and to prepare as best as possible in case an actual incident occurs during the season. Below is the overview of the scenario completed by Ruby Mountain IHC in 2014, target points for the simulation, and pictures of the crew during the scenario. A copy of the scenario outline is provided in the appendix for use by other crews.

**Crew Medical Scenario (Completed 5/21/2014)**

The 2014 scenario focused on the acting crew boss and the crew EMT’s. The scenario began with the crew responding to an initial attack fire at a nearby location. After the crew began hiking in, the IC called and asked for a saw team (a sawyer and swamper) to assist him. The saw team was then advised they had been hit by a boulder rolling off a steep slope leaving one person unconscious and the other with a broken leg. The crew then disengaged from the simulated fire and began patient assessment and transportation for medical evacuation.

**Target Points for Simulation:**

- Set up an “incident within an incident” facilitated by crew boss
- Involvement of all crew EMT’s in the patient assessment, initial treatment, and transportation to the medevac site
- Treatment for potential shock/internal bleeding to the unconscious patient by EMT’s
- Organization of tasks required by incident (medevac site, communication with transport ship, communication with IC, transport of patients)
- Separation from fire incident until medical is resolved (stoppage of suppression activities by crew)
- Utilization of the IRPG for emergency medical care guidelines, patient assessment, and the new medical incident report form
- Emphasis on the speed of getting the critical patient to the medevac site

“The essence of training is to allow error without consequence.”

— Orson Scott Card
Category- Team Results

Ruby Mountain IHC Field Day

Ruby Mountain IHC conducts a yearly field day scenario near the end of the mandatory IHC critical training. This scenario helps new members of the crew put newly acquired skills to the test, while allowing returners to teach others and improve upon themselves. The field day is designed to form a team environment in which everyone is needed to accomplish the task and all members are used in some form or fashion. If individuals do not know a certain task it is incumbent upon them to ask for help. It is also expected that more experienced team members assist others in learning all aspects of the job. This “build from the bottom” approach fosters an environment where all are empowered to lead and each member of the team is familiar with nearly all jobs on the crew.

RMHS Field Day (Completed 5/27/2014)

This field day is designed to emulate an average day on the fire line. The overall goal is to allow for certain individuals to be targeted as trainees (primarily crewboss), while keeping the vast majority of the other positions on the crew intact for stability. Squad leaders are kept running their squads to give the crewboss trainee solid leadership to lean on. Unlike many previous IHC field days this specific scenario was not designed to completely overload the targeted individuals, but merely to stress them and allow them to succeed or fail in a controlled environment.

This field day can be done nearly anywhere and it does not need to be extremely complex nor does it require weeks of planning. Using google earth, local knowledge, and various maps we were able to identify all of the necessary areas prior to one field visit to ground check everything. You could perform the field day without a sight visit, but unless you have extensive knowledge of the area this is not advised.

“Blue envelopes” are used to deliver messages at designated times. The envelopes are handed out in the morning to the appropriate individuals and are time stamped with the EXACT time they need to be opened. These envelopes are listed below. Depending on the experience level of the crew and the target of the facilitators certain scenarios can be added or subtracted. In past years an “envelope master” position was included to monitor the envelope time frames, but in this scenario it was omitted due to the lack of overall envelopes used.

The minimum number of facilitators needed is two, but leaders on the crew are also “working facilitators” that assist throughout the scenario. The two facilitators will need to play multiple roles/resources, as well as monitor the crew for corrective actions so it is a very demanding position. A minimum of three radio frequencies is recommended (five is ideal) to allow for a more realistic scenario as well as providing training in monitoring and toggling through multiple channels. It is advisable to have one channel designated as a facilitator only frequency to allow covert communication to adjust timeframes and other changes.

Target Points for Simulation:

- Team results; everyone is involved and required to accomplish task and objectives
- Delegation by leaders to prevent being overloaded by scenario
- Chainsaw refresher
- Familiarize individuals with crew dynamics and our specific approach to an incident
- Communication with adjoining resources and within crew

Leaders Intent:

The intent of this field refresher training is to introduce and instruct the most common aspects of our jobs to all members of RMHS. These include: hand line construction, cold trail-check line, gridding, spot fire protocols, and minor medicals. There are also a multitude of other “skills” that are paramount to the crew’s success and some of these will also be addressed. They include spinning weather, understanding LCES, accountability, and time management. Many of these aspects of the field day will be a repeat for some experienced employees, but it is intended to place everyone on the same page. It is also incumbent on those with advanced knowledge to take the time to teach those around them that have not been exposed to certain aspects of the job.

Task:

Conduct a field day at Spruce Mountain involving all members of Ruby Mountain Hotshots.
Purpose:

To introduce the crew to an average day in the field as a hotshot and set expectations for crew operations. This field refresher training will also meet requirements outlined in the “Standards for Interagency Hotshot Crew Operations.” In addition, this field training will accommodate faller A, RT-212, Crew Boss, and FFT1 training (if applicable).

End State:

This exercise should instill the RMHS SOP’s, standard IHC skills, and required work ethic expected of all members of the Ruby Mountain Hotshots. By the end of the simulation crew members should have a general idea of what is expected from them when assigned specific tasks.

Objectives:

1) Ensure firefighter and public safety by adhering to agency safety guidelines and following the designated a medical plan in the event of an incident.
2) Fulfill requirements as outlined in the “Standard for Interagency Hotshot Crew Operations” by instituting hand line construction, chainsaw operations, spot fire protocols, etc.
3) Accomplish various trainings to meet agency requirements and strengthen the depth of RMHS: Faller A, RT-212, Crew Boss, and FFT1 (if applicable).
4) Provide job applicable training to individuals at all levels throughout the crew: LCES, 10’s & 18’s, fire weather, communication, etc.

Summary:

The field refresher training will take place near Spruce Mountain on Elko District BLM. It is intended to be a full day simulation that will attempt to re-create a “standard” day on the line as a hotshot. The day will start with a call to the Crew Boss Trainee, include a multitude of pertinent exercises once the crew has arrived on scene, will feature a camp/spike camp etiquette tutorial, and conclude with an After Action Review. It will also feature “blue envelopes” which will be given to assigned individuals and will add certain stressors or information to the exercise at assigned times. This year there will also be a point of emphasis on taking the time to instruct the tasks before implementing them. An example would be if a grid is to be performed a thorough briefing will be given. This is our chance to instruct good, quality work habits in our employees and it should not be assumed that all personnel know the ins and outs of RMHS SOP’s.

Another point of emphasis will be assuring continuity of as many overhead positions as possible throughout the day. We cannot strip down the crew of all of its leadership this early in the season to do a simulation and expect it to function at a high level. Lead and squad leader level influence will be needed to ensure that tasks are being taught correctly and in a timely fashion. They should not be leading the entire operation, but they should add valuable insights and corrective actions as needed. In addition to this, it is expected that experienced crew members assist others in duties such as spinning weather and radio programming. This is our opportunity to build a team environment that encourages questions and learning.

Above all, this field day will be challenging; both mentally and physically. Being a hotshot is not an easy job and it is rarely glamorous. Throughout the day exercises should challenge all participants to be at their best, if they are not then corrective actions will be implemented. These can include further instruction, physical training, and position re-assignment. It should be our goal to create the safest and strongest RMHS possible and the foundation to this is proper education and mentoring.

1 Field Refresher does not cover all elements of suggested training. Omitted items will be addressed during other aspects of critical training.
2014 Scenario Timeline

- Early Call To CRWB (T) (TBD)
- Arrive at Station/Morning Intel (5:30)
- RT-212 Classroom Portion (Optional) (Squad Leader #1) (5:45)
- Crew Leaves Station (6:45)
- Crew Arrives @ DP1 (8:45)
- Crew Begins Operations (8:50)
- Prep To Fly (8:50-9:20)
- Flying Tutorial/Corrective Actions (Squad Leader #1) (9:20-9:30)
- Flying Cancelled & Given Burn Assignment (9:30)
- Crew Begins Hiking To Fire (9:35)
- Arrival @ Proposed Burn Ops Location (Fire Edge) (10:00)
- Division Requests Crew To Go Direct (10:05)
- Line Construction Tutorial (Squad Leader #2) (10:05-10:20)
- Crew Begins Direct Hand Line & Cold Trail Check As Appropriate (10:20)
- Air Attack Informs Division of Possible spots (12:30)
- Grid Training (Squad Leader #3) (13:05-13:20)
- Crew Begins Grid Operation (13:20)
- Continue Line Dig (Assess line rehab) (14:00)
- Crew Terminates Scenario and Heads Back To Rigs (15:30)
- Refurb Tutorial/Refurb (Assistant) (15:45-16:45)
- AAR/PLOWS (16:45)
- Camp Tutorial (Superintendent/Assistant) (1700)
- Return To Station (1715-1900)
- Refurb As Necessary (1900-1915)

Scenario Add-Ons

These scenario add-ons are intended to correlate with the field day exercise once in motion. Add-ons will be handed to each individual at the beginning of the day and be time stamped. Each add-on will be contained within a blue envelope, which only overhead and the individual receiving will know the contents. Add-ons are not meant to cause failure for the individual, but merely incorporate everyday fireline situations. Some add-ons will begin with a tactical pause where overhead will demonstrate the assigned function to the crew. It is imperative that the teaching does not end after the tutorial; if the product is not correct it needs to be fixed. It is the overall intention of the add-ons to partially fulfill certain proficiency checks within the Standards for Interagency Hotshot Crew Operations Guide.

Roles Needed:

- Dispatch- Superintendent
- Division Alpha- Superintendent
- Air Attack/SEAT/Helicopter/IC- Assistant
- Time Manager- Assistant

Frequencies Used:

- P1 as Crewnet-
- P2 as Div A TAC-
- P3 as Air to Ground-
- National as Command-
- Overhead Channel-
**Action Point #1 – Superintendent - Time TBD**

Call to Crew Boss Trainee to notify him that the crew is being dispatched to a fire scenario near Spruce Mountain. Notify him that he will be Crew Boss Trainee for this assignment and that a resource order and further instructions will be inside a blue envelope in his mailbox. Clarify that all crewmembers need to be at the station and ready by 0530.

**Envelope #1 - Crew Boss Trainee - 0530**

You have been selected as Crew Boss Trainee for this field day exercise. The intention of today is to refresh the crew on certain proficiencies, teach new members how the Ruby Mountain Hotshots do specific tasks, and to give you a training assignment as CRWB. Although there is no actual fire on the ground, use this scenario as if it were an assignment on a fire at any time of the year.

If at any time during the scenario an actual incident occurs, notify overhead immediately. State the nature of the incident. The scenario will cease immediately and action will be taken under normal crew functions to remedy the situation. Inform the crew of this and instruct them to clearly identify any medical scenarios as such.

It is now 0530 and you have been called by dispatch to mobilize your crew to the Spruce Mountain area. Lightning activity two nights ago started a fire in the area that was lost during Initial Attack due to extreme winds. Weather in the area has been seasonably dry and winds over the last week have been strong and erratic. Several other resources are also heading to the incident known as the Spruce Mountain Fire.

Brief the crew within the next 15 minutes on current weather, SIT report, and 6 minutes for safety. Distribute all of the blue envelopes to the appropriate individuals. Inform them that they must follow the time frames on their envelopes.

Prior to departure, contact Simulation Dispatch. Contact the Incident Commander on command when you are close to the incident. Remember throughout the day to take some time to read all of the material that you are given. Key information is found in all of them.

You are in charge and the safety/wellbeing of the crew is in your hands. Please note that everyone must have 30 minutes off of the clock during the day, but work cannot cease at any point so plan accordingly.

**Action Point #2 – Superintendent - 0845**

Meet the crew at DP-1. Brief the CRWB (T) on the current fire behavior/weather, tactical plan, and give him the IAPs.

Fire Situation:

The Spruce Mountain Simulation Fire started on 5/25/2014 and has grown to 300-400 acres. Lack of resources has hampered control efforts. No structures or private land holdings are threatened, but crucial sage grouse and mule deer wintering range is threatened. Plan is to fly the crew to a remote area of the fire and have them spike out. Logistical needs are slow to arrive due to high fire activity on the district.

**Envelope #2 - Crew Member #1 - 0850**

After CRWB(T) briefing to the crew, inform him that you will take charge of putting together sling loads for one operational shift for our crew. Another crewmember will be tasked with creating manifests of the loads and passengers (Crew Member #2).

**Envelope #3 - Crew Member #2 - 0850**

A large part of being a successful HECM is doing proper manifests for personnel and cargo. Get the allowable from Crew Member #1 and create manifests for our sling loads, as well as for troop transports. Give these manifests to Crew Member #3 when completed.

**Envelope #4 - Crew Member #3 - 0900**

After sling loads are created and manifests are done, do a helicopter passenger briefing for the entire crew, omitting any specifics to our vacant helicopter.
Action Point #3 - Squad Leader #1 - 0920

Lead tutorial/corrective actions on RMHS helicopter flying operation and spike gear SOP’s (note corrective actions while crew is performing previous exercise).

Action Point #4 – Superintendent - 0930

Division Alpha contacts RMHS CRWB(T) to inform him that rotor operations are cancelled due to mechanical problems with the helicopter. Ask him to bring the crew up the road to the pink flagging, then follow the flagging to the fire. They need to come prepared to perform a burn operation.

Envelope #5 - Crew Member #4 - 1000

Assemble the gear necessary to be a lookout on this incident and identify several locations that will work as a lookout post. Since your lookout location could also be used as a human repeater site, program the division frequency in your radio. Relay the possible locations to the appropriate personnel and show them what you have assembled for the mission. When you have completed this task return to what you were doing. (You will not actually go to any of the lookouts that you have selected)

Envelope #6 - Crew Member #5 - 1000

The crew is planning to conduct a burnout operation in this area. Division has tasked our crew with getting a spot weather forecast prior to putting fire on the ground. Take weather observations on the hour and read them on crew. Obtain any additional information necessary for a spot weather forecast. Division Alpha wants the information by 1200. Pass this information through the appropriate personnel.

RMHS Weather:

Temperature:

Relative Humidity:

Winds:

Probability of Ignition:

Any other concerns or items of note: (cloud development, wind switch, etc)

Action Point #5 – Superintendent - 1005

Contact CRWB(T) and request that the crew go direct instead of burning out.

Action Point #6 - Squad Leader #2 - 1005

Lead tutorial on line construction and hotspot/cold trail methods.

Action Point #7 – Assistant - 1109

Flag off a half acre spot fire in front of Crew Member #6’s saw team.

Envelope #7 - Crew Member #6 - 1110

You notice a small puff of smoke in the green a little more than a chain away from your location. It is a spot fire outside of the proposed containment line. Take your saw team to check out the situation, relay the information back to the crew, and take appropriate action. Currently it is smoldering with little activity. Notify appropriate personnel.

Envelope #8 - Crew Member #7 - 1135

Your saw team has been taking action to put out a small spot fire. Activity has been minimal up until now, though some minor torching is occurring. It is getting too hot to stay direct. You will need to request bucket drops from a helicopter.
Action Point #8 - Squad Leader #1 - 1140

Flag off three small spot fires within two chains off of the proposed containment lines. Wait for Crew Member #8 to arrive. You are at the tie in point where another crew has already worked. After Crew Member #8 reaches your point and you instruct him to return to the crew, let CRWB(T) know you’ve found the end of our portion of handline.

Envelope #9 - Crew Member #8 - 1145

We have already found a spot outside of our proposed containment lines. You have been tasked by your squad leader to scout ahead and look for additional spots outside of our proposed line. Take one other individual with you and extinguish what you can. Notify the appropriate personnel of your findings.

Action Point #9 – Superintendent - 1200

Call CRWB(T) and tell him that things are looking good, but you would like a medivac/helispot site installed near the tie in point. Tell him you saw one of his Squad Leaders near the area and should contact him to get it put into place.

Envelope #10 - Crew Member #9 - 1200

Progress is going well on our direct line construction. Division has tasked us with constructing a medivac/helispot site near the tie in point. Your squad leader has tasked you with identifying possible locations for the site, getting a GPS coordinate, and flagging off the perimeter. Notify appropriate personnel when you are complete.

Envelope #11 - Crew Member #10 - 1215

You are down to less than two quarts of water.

Action Point #10 – Assistant - 1300

As Air Attack, call Division Alpha and notify him that you have seen spots outside of the containment lines on the other divisions. State that he may see more located out in front of Ruby Mountain’s line.

Action Point #11 - Squad Leader #3 - 1305

Lead tutorial on gridding procedures and let CRWB(T) take over and continue to grid

Envelope #12 - Crew Member #11 - 1330

Ruby Mountain Hotshots take weather every hour of every shift. It is expected that every individual knows how to do this task. Take over slinging the weather for the rest of the shift and transmit over the radio to the crew.

Envelope #13 - Crew Member #12 - 1350

Medical Scenario (Communicate to the EMT/Squad Leader responding that this is a medical scenario. This is intended to be a minor medical) - You notice a bee hive after being stung. You are allergic, but you are not experiencing an allergic reaction. Relay this to the appropriate personnel.

Your symptoms include:

- Pain around the sting site
- No shortness of breath or other allergic symptoms
- Stinger present in sting site

After being treated by the EMT resume work.
As a Ruby Mountain Hotshot you are expected to work hard every day and share the workload. You have been working for a few hours now and your tool has unexpectedly broken. This specific tool is not useable for the rest of the day. Notify the appropriate personnel to remedy the situation.

Scout in front of the crew for retardant drops. Order the appropriate fixed wing aircraft and direct them upon arrival.

Medical Scenario (Communicate to the EMT/Squad Leader responding that this is a medical scenario. This is intended to be a minor medical) - The temperatures are high and the relative humidities are low. You are feeling dehydrated, but overall you are doing well. Relay this to the appropriate personnel.

Your symptoms include:

- Hot and sweaty
- Weak

After being treated by the EMT resume work.

You have done well in the past leading informative sessions of PLOWS (AAR). Do that for the incident here today and make sure the new crew members grasp an understanding of how the Ruby Mountain Hotshots lead an AAR. Teach them as we are actually doing it. Do this once refurb has been completed.

Role Player Information:

- We will call real dispatch and inform them of the crew’s plans
- Helicopter that will be used for sling loads and crew shuttle will be OCR and has an allowable of 1200 pounds jettisonable and 800 pounds internal.
Leadership Discussion: “Band of Brothers: Part 7 - Breaking point” (Completed 5/28/2014)

This exercise was completed by Ruby Mountain IHC towards the end of critical training for the crew. The clip we viewed was a scene in which a relatively inexperienced leader took command of a certain mission and in the end had to be replaced due to poor decision making and inability to work under stressful conditions. The idea of the exercise was to facilitate a discussion about leadership; what makes a good/poor leader, what are some different styles of leadership, and what have people seen from good leaders they have worked with in the past. After the viewing of the video clip, our discussion was geared towards analyzing the leadership displayed, reactions to a high stress environment (and the stress curve), as well as command presence. Below is a list of discussion topics as well as notes on what we talked about before and after watching the clip. A full copy of this exercise, facilitators guide, and discussion topics is found in the appendix.

Pre Video:

**Leadership Styles and explanations:**

- Leader- Set’s the example through conduct
- Someone who puts the crew above themselves/has the crews best interest in mind at all times
- Leading by example- Knowing their job and teaching it to others/ only stepping in when someone needs help
- Someone who is willing to let people figure some things out on their own
- Good communicator- uses all styles: Directing, participating, and delegating

**Character qualities of good leaders:**

- Confident, has command presence, integrity, patience, caring, humble, decisive

**Effects of high stress environments on leadership:**

- Loss of mission focus
- Hard to command/ have command presence when you lose your head
- Stress raises performance to a point, you can hit a wall and performance decreases (stress curve)

**Can a follower be a leader?**

- You need to be a good follower to be a leader
- You need to know how to solve problems at the lower levels
- You can be a leader as a crew member to other crew members

Post Video:

**Overall impressions of clip:**

- Initial instructions were not clear to lieutenant- became highly stressed
- Call was made to replace the lieutenant with a new leader
- Command presence was shown- both good and bad

**What styles of leadership were used?**

- Delegating, leading by example
- Leaders must know what they are asking other people to do

**What is command presence and how was it shown?**

- The understanding of everyone who is in a leadership/command role
- Can be shown in different ways- through being stern and direct or while being very calm

**What was the first commander’s reaction to the high stress environment?**

- He fell apart- stress level got too high
• He did the exact opposite of what he was being told to do
• Everyone else’s stress levels went up as a result of his going up

What qualities did the second leader possess that the first did not?

• He was calm- Lead by example
• Had a very strong command presence
• He had focus and intent
• Seemed to have a higher stress curve

Was this exercise useful?

• Yes, seeing good leadership presence
• Good to discuss and see what you need to do to be a good leader
• Good to talk about the leaders you aspire to be like
Ruby Mountain IHC Incident Commander Scenario

Ruby Mountain IHC believes in using scenarios throughout the season to sharpen existing skills, as well as exposing individuals to new challenges in a stressful situation. Small fires, especially ICT5 fires are extremely rare for IHC’s and scenario training is usually the best form of exposing individuals. The scenarios allow the individuals to fail in a controlled environment and learn from their mistakes.


This 2014 scenario focused on a combination of orientation and GPS skills, as well as size up and communication skills with simulated dispatch. Two role players were used to set-up the course, as well as act as simulated dispatch and facilitators. The scenario started off with a call to the targeted individuals with ICT5 task books or who were recently signed off. The call was from simulated dispatch and gave them reporting instructions to a “fire.” This included a bearing and an exact distance from the trucks to the simulated “fire” as well as a general description of the area i.e. wispy smoke, on a ridge, etc. Dispatch was vague as the report came from a private citizen passing by. The targeted individual navigated to the fire, which was marked with flagging. The flagging was labelled with instructions which included fire behavior and characteristics. Two “fires” were flagged off; one being a single tree for entry level trainees and the second was geared towards more experienced individuals with approximately an acre with some active flame that required additional resources. The role players were in positions to see if the individuals were off course and if so, gave them GPS coordinates to speed up scenarios. Upon arrival to the “fire” the individuals used the information on the flagging to give a full size up to simulated dispatch. Once the size up was completed the scenario was ended and the facilitators conducted a debriefing with the individual.

Target Points for Simulation:

- Providing a rare opportunity for ICT5 trainees on an IHC
- Navigation using orientation, compass, and GPS
- Prompted individuals to ask questions if needed (they were given information if they asked)
- Familiarize individuals with size up cards and communication to dispatch
Category-Commitment:


As a commitment to safety, during down time the crew will review fire accident investigations and have a discussion using FLA questions to analyze what went wrong and what we, as a crew can do to create a safer environment. The “Little Venus Fire Shelter deployment” occurred on 7/18/2006 in which 10 individuals were forced to deploy shelters. Below is the discussion the crew had after reviewing the investigation report.

**FLA QUESTIONS**

- **What were the contributing factors that played a significant role in this incident?**
  - 4 detailers on the UNAWEEP FUM
  - Cattle in the fire perimeter
  - 60%-70% bug killed trees in area
  - nearby repeater was not functioning
  - Satellite phone conversation was short
  - Helicopters on incident were restricted use
  - Red flag warning for the day
  - Late start to the day
  - 60%-70% bug killed trees in area
  - Late start to the day

- **What other factors may have been missing or overlooked?**
  - Trust issues between fuel module leader and detailers
  - Complacency due to nature of assignment
  - 2006 was a heavy fire season, individuals may have already been tired

- **What were the lessons learned?**
  - Recognize complacency: continue training all year, always give 100%, PT, and refurbish all equipment fully
  - Use pre-mortems so that when failures occur, changes are already anticipated
  - Use to the full extent: LCES, Trigger Points, and all the elements of a correct briefing
  - Use all tools at hand and make sure all know how to use (packers did not have PPE or knowledge of Commo.)
  - Have the foresight to be able to change with conditions; be dynamic and flexible
  - Have accountability for yourself and crewmembers

- **How can we incorporate the lessons learned into our daily operations?**
  - Stay calm and cool in stressful situations by incorporating training and planning all year long
  - We maintain squad accountability and look out for each other
  - Use staff rides and training opportunities such as FLAs to learn from
  - Ask questions when unsure
  - Maintain a high level of crew cohesion
Ruby Mountain IHC Incident Commander and Mapping Scenario

Ruby Mountain IHC uses down time while at station or on assignment to provide training to individuals. This can include S and L curriculum, as well as “real world” training. It is our belief that to build a great crew all members of the crew must be skilled in nearly all aspects of wildland fire. In a perfect world everyone would be replaceable as all members of the crew would know all of the jobs.

**Incident Commander and Mapping Scenario (Completed 7/3/2014)**

The facilitators took two forest maps to two “stations.” At each station the “IC” was given the assignment as follows:

- You have been contacted by dispatch to report to a simulated smoke with your squad
- One station was given a bearing from two lookout towers (triangulation), while the other station was given a bearing and distance from only one lookout tower.
- The student must find where the smoke is located on the map by identifying the prominent landmark
- The student must provide the facilitator with detailed instructions on access to the simulated smoke

The student was allowed all the time they needed to find the point and make an access plan. If they answered incorrectly or the facilitator sensed uncertainty they would assist them in accomplishing the task. There were multiple answers to accessing the simulated fire, but the general idea was choosing the easiest path while taking into account expected weather and fire behavior.

Additional tasks could easily be added to achieve the desired result/difficulty level. Some of them include:

- Identify township, range, and section (1/4 sections if necessary)
- Find/convert GPS coordinates of simulated smoke
- If time allows, have student actually access simulated smoke from similar directions

**Target Points for Simulation:**

- Familiarize individuals in map reading and the importance of making accurate measurements and readings
- Enable students to make decisions independently in a controlled environment
- Communicating directions to dispatch/adjoining resources
Category – Trust

Trust Exercise: Helicopter Operations (Completed 7/8/14)

While staging for initial attack the crew covered some basic helicopter information and built an exercise that required trust and allowed for trust to be gained. The facilitators each took a group of two individuals, gave them a radio and had them program a crew frequency. One radio operator was to act as the personnel calling in a bucket drop while the other was a pilot. The radio operator moved to a location not known to the pilot while the pilot walked away, blindfolded. The pilot was briefed on the rules of the scenario and was led out of sight of the radio operator. As soon as the rules had been given to both participants the pilot called the radio operator indicating that he was new to the fire and needed directions to the target. Hazards in the parking lot were relayed to the pilot, suggestions were given to increase the stress level, and the pilot was occasionally guided away from the target to increase the difficulty. The challenge that most explicitly dealt with trust occurred when the pilot gave the radio operator the opportunity to guide him safely to the target. After the pilot had made the goal the roles were swapped. We briefly discussed the scenario, and then another group began. After 30 minutes, each crew member had been through both roles and we convened to discuss the exercise. The discussion presented more information: signal mirror use, long-line missions, hand signals, etc... We answered questions and then practiced mirror flashes.

The following are some discussion points and pictures of the exercise. The complete exercise guide can be found in the appendix.

Discussion Topics and Activities Before Exercise:

- Read about trust: Leaders start by building a foundation of trust in teams. Trust is the underpinning of all cohesive teams; without it, teams are merely collections of individuals that can never hope to achieve synergy. Recognizing that communication is the key to building trust, we communicate openly with teams and make sure we convey the essence of our values, mission, and vision. In doing so, we also communicate information about ourselves because our teams must, first and foremost, trust us, (taken from page 53 of Leading in the Wildland Fire Service, PMS 494-2).
- How does communication relate to trust?
- What would a team be without trust? How does it naturally occur and how do leaders implement it?
- What are problems with implementing it?
- How do we effectively communicate?
- What are examples of distrust and untrustworthiness?

After the Exercise:

- What problems did you encounter with trust?
- Was this exercise useful?
**Category-Resilience**

"HERO" survey (Completed 7/19/2014)

On 7/19/14 the crew administered the “Highly Effective and Reliable Organization (HERO)” survey. The survey was completely anonymous and all of the totals were averaged to come up with a final average for each category.

<table>
<thead>
<tr>
<th>Category</th>
<th>Average Crew Score</th>
<th>Highest Score Possible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commitment to Resilience</td>
<td>26</td>
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</tr>
<tr>
<td>Deference to Expertise</td>
<td>19.5</td>
<td>21</td>
</tr>
<tr>
<td>Preoccupation with Failure</td>
<td>25.4</td>
<td>30</td>
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<tr>
<td>Reluctance to Oversimplify</td>
<td>29.3</td>
<td>36</td>
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<tr>
<td>Sensitivity to Operations</td>
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<td>9</td>
</tr>
<tr>
<td>**Total:</td>
<td>108.2</td>
<td>126</td>
</tr>
</tbody>
</table>

According to this survey our total score implies that we are well on our way to being a Highly Effective and Reliable Organization. A copy of the survey is included in the appendix.

**Category-Commitment:**

Ruby Mountain IHC FLA review: Review of three felling accidents (Completed: 8/7/2014)

For this accident investigation discussion, the crew broke into three groups and each group received an accident investigation report from a felling accident. Each group was to review the investigation, answer the FLA questions, and then present it to the rest of the crew. The three accidents being discussed were “Chips felling injury,” “Chittenden tree felling,” and the “Crandall felling accident.” Below are the FLA questions for each investigation and the crew’s response.

**CHIPS FELLING INJURY FLA 8/07/2014**

**FLA QUESTIONS**

- What were the contributing factors that played a significant role in this incident?
  - Not felling tree before fire got into it
  - Pounding out wood instead of finishing cut
  - Not looking up the entire time
  - 18 year sawyer may have been complacent
  - Tree had obvious lean

- What other factors may have been missing or overlooked?
  - Too many line EMTs without established leadership to control the scene
  - Dead zones without communication to paramedics

- What were the lessons learned?
  - Mitigate hazard once it has been identified
  - Adjust tactics as necessary
  - Continue to look up when falling a tree
  - Try to not use a pounder as much when working on fire weakened trees and snags
  - Could attach an EMT or first responder to falling teams

- How can we incorporate the lessons learned into our daily operations?
  - Always look up when felling
  - Brief on “what if” scenarios for medical calls and other incidents
  - Establish communications with all resources prior to engagement
  - Establish a main contact for incidents within an incident
CHITTENDEN TREE FELLING FLA 8/07/2014

FLA QUESTIONS

- What were the contributing factors that played a significant role in this incident?
  - Switching sawyer mid cut after running out of fuel
  - No full wrap handlebar
  - Underestimating tree
  - Not communicating hazards
  - No supervisor present
  - No medical plan in place or communicated

- What other factors may have been missing or overlooked?
  - Skill level of sawyers
  - No first aid or responder on scene

- What were the lessons learned?
  - Brief or get briefed before taking action
  - Have EMT or first responder on scene
  - Continue size up during all phases of felling
  - Same sawyer should finish felling tree once started
  - Ensure medical plan is in place before beginning work at new site
  - Call and inform supervisor and hospital when transporting a patient/colleague

- How can we incorporate the lessons learned into our daily operations?
  - Continue sizing up after proper briefings
  - The classification of hazard tree and the qualifications of sawyers
  - Continue to wear all PPE as stated in work site JHA’s
  - Have emergency protocols in place
  - Have qualified EMTs or First Responders

CRANDALL FELLING ACCIDENT FLA 8/07/2014

FLA QUESTIONS

- What were the contributing factors that played a significant role in this incident?
  - Only 1 escape route planned
  - Debris in the path of the escape route
  - Falling lane of tree was not a clear path
  - Sawyer just returned from a two week handcrew assignment
  - Rushing to fell the tree
  - Felling area was a rocky creek bed
  - Sawyer was newly certified as a “C”

- What other factors may have been missing or overlooked?
  - Escape route was not at a 45 degree from intended lay
  - Complacency while working in a creek bed that limited escape routes
  - Trauma kit was forgotten by crew on this particular day
  - No life flight was available

- What were the lessons learned?
  - Use escape routes as intended and appropriately
  - Do the hard right over the easy wrong
  - If not able to complete the task fully and safely in the allotted timeframe, change plans
  - Don’t get complacent
  - Clean out work area fully to complete task safely
How can we incorporate the lessons learned into our daily operations?

- Don't get complacent sizing up trees
- Have two escape routes
- Make sure qualified personnel are cutting trees they are comfortable with
- Clear out work area of debris, including escape routes
- Have qualified EMTs or First Responders on scene

**Category: Peer Accountability**

**Leadership Training and Discussion (Completed 9/25/2014)**

**Overview:**

A complete education on peer accountability occurs first hand, in the field with a discussion about the concepts, before and after, followed by an update later in the season to examine how the feedback was used. Another means of examining and teaching the concepts involves simulation exercises, such as a Sand Table Exercise (STEX), through leadership training, and with a physical training activity. However, the discussions are primary aspects of the leadership education since they help students verbalize and explore the subject from various angles and distances. On 9/25/14, while staging on a fire assignment, the crew discussed the following topics and revisited them afterward using PLOWS (which, in short, stands for Plans?, Leadership?, Obstacles?, Weaknesses?, Strengths?). The full exercise can be found in the appendix.

**Discussion Topics Before Event/Exercise:**

- We examined peer accountability: Leaders create teams in which team members hold each other accountable. More than any system of reward and discipline, more than any policy, the fear of letting down respected teammates and peers represents the most effective means of accountability. Peer accountability is an outgrowth of trust and commitment. We set the example by demonstrating that team members can hold us accountable, encouraging them to give us feedback on our own performance in meeting stated goals, (Page 54 of Leading in the Wildland Fire Service, PMS 494-2).
- How do trust and commitment relate to peer accountability?
- What would a team be without peer accountability? How does it naturally occur and how do leaders implement it?
- What are problems with implementing it?
- How do we effectively give and receive feedback?
- What are examples of uses and misuses of the fear of letting down teammates?
- Additionally, the instructor can lead a Team Effectiveness Exercise, (as found on page 17 of the Wildland Fire Leadership Campaign Reference Guide). “This exercise provides team members a forum for providing one another with focused, direct, and honest feedback about how their behavior can enhance overall team performance. Have each team member respond to the following question about their team mates: What is the single most important behavioral characteristic demonstrated by this person that contributes to the team’s strength? When each team member has received his/her feedback, each should summarize aloud one or two take-away items that made an impact.”

**Discussion Topics After Improvements:**

- Did you notice peer accountability often after having initially discussed it? How?
- Did you effectively change due to peers holding you accountable?
- How did you give and receive feedback throughout the season? Were AARs/PLOWs helpful?
- What problems did you encounter with peer accountability?
- Was this exercise useful?
- If this topic is revisited, either in a formal class discussion or individually with crewmembers, (perhaps during their Employee Performance Appraisals,) the discussion topics can center on personal/professional improvements, recognition of the crew’s use of peer accountability, and problems encountered.
- It may be useful to have another Embracing Accountability exercise, (as found on page 17 of the Wildland Fire Leadership Campaign Reference Guide). “When a team has progressed in trust and is high-functioning, another, related activity may be done, with each team member responding to this question about their team mates: What is one behavior or characteristic demonstrated by this person that can sometimes obstruct team progress or the general working of the team? As members share, the leader will question the team to see if any are taken aback or surprised by the feedback. When each team member has received his/her feedback, each should summarize aloud the one or two take-away items that made an impact, and that will be worked on. After the team meeting, each member will email the leader the issues they have decided to work on, individually, for the good of the team. At the next team meeting, each member will report personal progress, and solicit new feedback from their team mates.”
The Ruby Mountain Hotshot organization is founded on participation from every member of the crew. In 2010 the Superintendent and Assistant created and implemented the “RMHS Delegation System” which has been revised and is still in place today. This system is a way to provide opportunities for everyone to contribute to the overall objectives of the crew and give crewmembers on the job training in other areas of operations. The system is designed to spread out workloads and to always have a trainee for every position in order to provide future resilience of the crew should someone get taken out of the equation. Functional areas have been identified within the organization with correlating standard operating procedures (SOP’s) for each manager position. This system requires that the Superintendent and Assistant be highly proficient in all positions and that they oversee the critical positions to ensure that each manager is following the SOP’s for their position. Less critical positions have oversight at the squad leader and lead crewmember level. The table below is a list of all delegated positions and the table of organization is how we implemented this system for the 2014 season.

**RMHS Delegated Duties:**

- Cache Manger
- Supply Manager
- Purchasing Manager
- Time Keeping Manager
- Fire Experience/Training Manager
- Superintendent Truck Manager
- Fuel Manager
- Safety Briefing/AAR Manager
- Facilities Manager
- Lunch Manager
- Crew Camera/Media Manager
- Fleet Manager
- Per Diem Manager
- Master Crew Tracking Manager

"An empowered organization is one in which individuals have the knowledge, skill, desire, and opportunity to personally succeed in a way that leads to collective organizational success." - Stephen Covey
CATEGORY – Healthy Conflict

In 2012 Ruby Mountain IHC started using a new system for debriefing after incidents called “P.L.O.W.S.” P.L.O.W.S. is an alternative to the After Action review and is meant not to point fingers but to facilitate review of incidents, pointing out strengths and weaknesses as well as areas that could use improvement. After every shift of significance RMHS will perform a P.L.O.W.S. One individual on the crew will volunteer and lead the session, hitting all the bullet points as the group contributes and discusses. Every individual has the opportunity to speak up and give input on what we can improve on and what we did well. In one section the group will have the opportunity to point out weaknesses and the areas that the crew needs to improve on without making it personal. Getting everyone’s point of view is healthy because it helps us to understand what’s going on, helps the group to resolve issues quickly, and keeps everyone focused on the group and mission. The table below will line you out on how to facilitate a P.L.O.W.S.

P.L.O.W.S

PLAN:

State the plans that were in place. Follow up by asking any relevant questions.

- Did everybody know what the plan was?
- Was the plan sufficient to accomplish the objectives?

LEADERSHIP:

- What leadership was in place?
- Was the chain of command clear?
- Was leader’s intent communicated and sufficient?

OBSTACLES:

- What obstacles were encountered and how were they mitigated?

WEAKNESSES:

- What were weaknesses that should be improved upon?
- How will they be improved?
- Is follow-up action required?

STRENGTHS:

- What were strengths that should be sustained?
- How will they be sustained?

ADITIONAL QUESTIONS:

- Are there any additional questions or topics that should be discussed?

“One of the tests of leadership is the ability to recognize a problem before it becomes an emergency.” —Arnold Glasow
Ruby Mountain IHC Commitment to Safety

Commitment is vital to the success of any organization, especially to Highly Reliable Organizations. To achieve a high level of commitment from every Ruby Mountain Hotshot, we foster an environment where information is shared, delegation is used, and personal interest is taken into account. With information being shared, every crewmember gains a greater understanding of what the mission is and what tactics will be employed to accomplish the goal. By delegating, accountability and responsibility is increased, inherently leading each crewmember to agree more with the mission objectives. Through accounting for personal interests, crewmembers know that they themselves are getting something out of the mission, leading to a huge increase in commitment.

To specifically increase the Ruby Mountain IHC commitment to safety, we will use facilitative learning analyses (FLA’s), Lessons Learned, and safety alerts in structured group learning sessions. Sharing various videos, PDFs, and audio recordings will help increase the crew’s understanding of specific events that could possibly arise in the line of duty. By going over the attached FLA QUESTIONS sheet, we will be able to agree as to how we can incorporate the lessons learned and be held accountable for our future decisions. The whole process, along with the obvious welfare of each individual, will increase the personal interest of each crewmember.

Examples of Facilitated Learnings and Safety Messages to be used:

- California Wildland Fire Coordinating Group Pre Season Safety Alert
- Chips Fire 2012 Felling Injury
  - [http://www.wildfirelessons.net/communities/resources/viewincident/?DocumentKey=4307c165-efc4-4d16-9aed-4d1766dd3c2](http://www.wildfirelessons.net/communities/resources/viewincident/?DocumentKey=4307c165-efc4-4d16-9aed-4d1766dd3c2)
- Fire Fighters Inside the Iron Lessons Learned
  - [http://www.youtube.com/watch?v=nY6D8uu8FJY&feature=youtu.be](http://www.youtube.com/watch?v=nY6D8uu8FJY&feature=youtu.be)
- Tuolumne 2004 Wildfire Fatality Burnover
  - [http://www.wildfirelessons.net/communities/resources/viewincident/?DocumentKey=6b0e89bd-7aba-4b67-8210-27ddc8e01aeb](http://www.wildfirelessons.net/communities/resources/viewincident/?DocumentKey=6b0e89bd-7aba-4b67-8210-27ddc8e01aeb)
- Crandall Felling Accident 2010
  - [http://www.wildfirelessons.net/communities/resources/viewincident/?DocumentKey=e5cb06e2-3ece-4313-9fc5-abfafa6fd76bf](http://www.wildfirelessons.net/communities/resources/viewincident/?DocumentKey=e5cb06e2-3ece-4313-9fc5-abfafa6fd76bf)
- Little Venus 2006 Wildland Fire Use Shelter Deployment
  - [http://www.wildfirelessons.net/communities/resources/viewincident/?DocumentKey=e7f0e80b-05fc-4f58-9e88-0f4960e9106c](http://www.wildfirelessons.net/communities/resources/viewincident/?DocumentKey=e7f0e80b-05fc-4f58-9e88-0f4960e9106c)
- Saw Stopping Performance of Dirty Chaps
- Rivera Mesa 2006 Wildfire Entrapment
  - [http://www.wildfirelessons.net/communities/resources/viewincident/?DocumentKey=b24a6d3-3590-49ce-b9ac-e7e5d4ee8c6a](http://www.wildfirelessons.net/communities/resources/viewincident/?DocumentKey=b24a6d3-3590-49ce-b9ac-e7e5d4ee8c6a)
**FLA QUESTIONS**

1. What were the contributing factors that played a significant role in this incident?

2. What other factors may have been missing or overlooked?

3. What were the lessons learned?

4. How can we incorporate the lessons learned into our daily operations?
Leadership Training and Discussion: Peer Accountability

Overview:
A complete education on peer accountability occurs first hand, in the field with a discussion about the concepts, before and after, followed by an update later in the season to examine how the feedback was used. Another means of examining and teaching the concepts involves simulation exercises, such as a Sand Table Exercise (STEX), through leadership training, and with a physical training activity. However, the discussions are primary aspects of the leadership education since they help students verbalize and explore the subject from various angles and distances.

The following are suggestions and tools for facilitating the discussions about peer accountability.

If an event, such as a wildfire assignment are to be used for instruction, the focus should be on the classroom discussion beforehand and the AAR/PLOWS afterward with a more thorough review at the home unit. PLOWS works like an AAR but stands for: Plans?, Leadership?, Obstacles?, Weaknesses?, and Strengths?, (see Discussion Notes in the Facilitator’s Guide for a full example).

If STEXs are to be used there are instructions and examples on the fire leadership website, (http://www.fireleadership.gov/toolbox/documents/TDGS_STEX_Workbook.pdf) and there are blank forms that are easy to create, save, and reuse, (see last pages). Other exercises and activities follow a similar format with the discussions being the most important aspect. However, a note-taker who is an active participant, will ensure documentation (on the Discussion Notes in the Facilitator’s Guide), for reference and course improvement.

With feedback in a structured and facilitated exercise, students will be able to see how peer accountability is an integral part of a team’s activities. By simulating or analyzing a high stress environment and examining team member’s abilities to lead and make good decisions, students will be able to articulate what qualities in a person make for a good and a poor leader in a manner that is respectful and emphasizes how they hold each other accountable with careful feedback and listening.

Items Suggested For Exercise:
- Using on-the-job experiences: notes of the AAR/PLOWS that occurred after the event or shift, even if those are made after returning to duty station.
- Using a STEX: (Table), Sand, and pieces to represent resources/values, and a plan, (see Facilitator’s Guide).
- Using any other exercise: items that will simulate a stressful work environment
- Discussion documentation sheet and facilitators guide.

Objective:
- The objective of this exercise is to facilitate a discussion about the occurrence, usefulness, and healthy craft of peer accountability in the work place, to develop teams and leaders. The pre-exercise discussion will cover what the concept is, how to give good feedback, and particular experiences with peer accountability. The post-viewing discussion will be about the group’s reactions to the exercise, using AAR or PLOWS. A note-taker will provide each participant with feedback from the group on strengths and weaknesses to work on throughout the season, to be returned to later with another activity and/or discussion.
Target Discussion Points:

- Concepts of peer accountability: Leaders create teams in which team members hold each other accountable. More than any system of reward and discipline, more than any policy, the fear of letting down respected teammates and peers represents the most effective means of accountability. Peer accountability is an outgrowth of trust and commitment. We set the example by demonstrating that team members can hold us accountable, encouraging them to give us feedback on our own performance in meeting stated goals. (Page 54 of *Leading in the Wildland Fire Service, PMS 494-2*).
- Leader’s implementation of peer accountability.
- Relationship of Trust and Commitment to peer accountability.
- Usefulness and problems with implementation.

Facilitator’s Guide

- Assign a person to take notes and record comments on the discussion sheet while they contribute.

Discussion Topics Before Event/Exercise:

- Read about peer accountability: Leaders create teams in which team members hold each other accountable. More than any system of reward and discipline, more than any policy, the fear of letting down respected teammates and peers represents the most effective means of accountability. Peer accountability is an outgrowth of trust and commitment. We set the example by demonstrating that team members can hold us accountable, encouraging them to give us feedback on our own performance in meeting stated goals, (Page 54 of *Leading in the Wildland Fire Service, PMS 494-2*).
- How do trust and commitment relate to peer accountability?
- What would a team be without peer accountability? How does it naturally occur and how do leaders implement it?
- What are problems with implementing it?
- How do we effectively give and receive feedback?
- What are examples of uses and misuses of the fear of letting down teammates?
- Additionally, the instructor can lead a Team Effectiveness Exercise, (as found on page 17 of the Wildland Fire Leadership Campaign Reference Guide). “This exercise provides team members a forum for providing one another with focused, direct, and honest feedback about how their behavior can enhance overall team performance. Have each team member respond to the following question about their team mates: What is the single most important behavioral characteristic demonstrated by this person that contributes to the team’s strength? When each team member has received his/her feedback, each should summarize aloud one or two take-away items that made an impact.”

Event/Exercise:

- If an AAR/PLOWS will be used after an assignment to discuss peer accountability then a note-taker will have to be assigned for the roll. Focusing on one crewmember may not be a feasible means of getting them the information although they can serve as an example for the rest of the crew. For example have the role of the FFT1 trainee be noted during PLOWS and then have a discussion upon
returning to the duty station that examines peer accountability at work and encourages students to implement what they have learned.

- If an AAR/PLOWS will be used after a sand table or other exercise, plan to have each individual in the hot seat (ex: incident commander, team captain). Alternately, to save time, create a scenario where multiple participants have complex roles, in order to afford more for the AAR/PLOWS discussion afterward, (see Facilitator’s Guide). Again, a note-taker during the exercise and/or for the AAR/PLOWS will be useful.
- Duration of exercise and discussions at the discretion of the instructor.

**Discussion Topics After Improvements:**

- Did you notice peer accountability often after having initially discussed it? How?
- Did you effectively change due to peers holding you accountable?
- How did you give and receive feedback throughout the season? Were AARs/PLOWs helpful?
- What problems did you encounter with peer accountability?
- Was this exercise useful?
- If this topic is revisited, either in a formal class discussion or individually with crewmembers, (perhaps during their Employee Performance Appraisals,) the discussion topics can center on personal/professional improvements, recognition of the crew’s use of peer accountability, and problems encountered.
- It may be useful to have another Embracing Accountability exercise, (as found on page 17 of the Wildland Fire Leadership Campaign Reference Guide). “When a team has progressed in trust and is high-functioning, another, related activity may be done, with each team member responding to this question about their team mates: What is one behavior or characteristic demonstrated by this person that can sometimes obstruct team progress or the general working of the team? As members share, the leader will question the team to see if any are taken aback or surprised by the feedback. When each team member has received his/her feedback, each should summarize aloud the one or two take-away items that made an impact, and that will be worked on. After the team meeting, each member will email the leader the issues they have decided to work on, individually, for the good of the team. At the next team meeting, each member will report personal progress, and solicit new feedback from their team mates.”
Discussion Notes

Pre-Event/Exercise:

- **How do trust and commitment relate to peer accountability?**

- **What would a team be without peer accountability? How does it naturally occur and how do leaders implement it?**

- **What are problems with implementing it?**

- **How do we effectively give and receive feedback?**

- **What are examples of uses and misuses of the fear of letting down teammates?**
AAR/PLOWS:
(For an AAR see the IRPG).

P.L.O.W.S.

P.L.O.W.S. is an alternative to the standard After Action Review emphasizing safety in a learning environment. Information as it pertains to facilitating an AAR in the standard format is still relevant and applicable.

PLAN:

State the plans that were in place. Follow up by asking any relevant questions.

- Did everybody know what the plan was?
- Was the plan sufficient to accomplish the objectives?

LEADERSHIP:

- What leadership was in place?
- Was the chain of command clear?
- Was Leader’s Intent communicated and sufficient?

OBSTACLES:

- What obstacles were encountered and how were they mitigated?

WEAKNESSES:

- What were weaknesses that should be improved upon?
- How will they be improved?
- Is follow-up action required?

STRENGTHS:

- What were strengths that should be sustained?
• How will they be sustained?

ADDITIONAL QUESTIONS:

• Are there any additional questions or topics that should be discussed?

After Improvements:

• Did you notice peer accountability often after having initially discussed it? How?:

• Did you effectively change due to peers holding you accountable?:

• How did you give and receive feedback throughout the season? Were AARs/PLOWs helpful?:

• What problems did you encounter with peer accountability?:

• How could these exercises and discussions be improved?:
Leadership Training: Trust

Overview:
The following are suggestions and tools for an activity about trust.

In an attempt to teach several basic concepts involved in the use of helicopters on an incident, we developed an exercise using guided scenarios. The concepts are: radio programming, radio use, signaling (using mirrors, flagging, etc.), and the considerations needed to accomplish a mission using a helicopter, such as descriptions of the target from the pilot's perspective and calm, respectful communications.

This exercise was borrowed from the local Helitack crew’s S271 course. It involves the students directing bucket drops using radios and signaling tools, in this case while the individual acting as the helicopter pilot is blindfolded to enhance stress and simulate realistic confusion while on an incident.

With feedback in a structured and facilitated exercise, students will be able to see how trust is an integral part of a team’s activities. By simulating or analyzing a high stress environment and examining team member’s abilities to lead and make good decisions, students will be able to articulate the role of trust in wildland fire operations.

Items Suggested For Exercise:
- Two Radios (one for each participant of a group of two).
- Signal mirror (one for each group).
- Aircraft paneling and/or roll of flagging (one for each group).
- Blindfold, (handkerchief, watch cap, etc.)
- Documentation sheet and facilitators guide.
- Incident Response Pocket Guide (IRPG).
- Copy of The Resilient Team: Wildland Fire Leadership Campaign Reference Guide.

Objective:
- The objective of this exercise is to teach concepts of helicopter operations and to give participants an opportunity to experience helicopter operations without the helicopter or the incident and to focus students attention to the role trust has in these activities.

Target Discussion Points:
- Concepts of trust: Leaders start by building a foundation of trust in teams. Trust is the underpinning of all cohesive teams; without it, teams are merely collections of individuals that can never hope to achieve synergy. Recognizing that communication is the key to building trust, we communicate openly with teams and make sure we convey the essence of our values, mission, and vision. In doing so, we also communicate information about ourselves because our teams must, first and foremost, trust us, (taken from page 53 of Leading in the Wildland Fire Service, PMS 494-2).
- Leader’s building of trust.
- Relationship of communication to trust.
- Usefulness and problems with trust.
Facilitator’s Guide

- You may want to assign a person to take notes and record comments on the discussion sheet while they contribute.

Discussion Topics and Activities Before Exercise:

- What would a team be without trust? How does it naturally occur and how do leaders implement it?
- What are problems with implementing it?
- How do we effectively communicate?
- What are examples of distrust and untrustworthiness?
- Brief on the basics of helicopter operations, enough to engage the HECMs but not so much that individuals inexperienced in helicopter operations feel lost. **Brief on the scenario** (below): steps to a successful bucket drop. One team member acts as the personnel calling in the bucket drop while the other, blindfolded, acts as a pilot. Ask for any questions.

Event/Exercise:

- Guide the pilot out of view of the personnel, if possible, and have him/her initiate contact (ex: Ruby Mountain – “this is 5 kilo alpha on air to ground… I am new to the fire. What is your location,” etc.).
- The rest of the scenario should follow with the improvisations of the three participants, (photos 3 and 4).
- After the pilot has been guided to the target and blindfold removed, the three can discuss the activity, with feedback, answers, questions, etc., (see discussion points, below). Focus on trust: how it felt to be dependent on the skill, insight, and initiative of another. The important of communications in operations and how that effects trust, (5).
- Duration of exercise and discussions at the discretion of the instructor. With two groups an entire crew can be through the exercise in 30 minutes.

After the Exercise:

- After everyone has been through both roles, the group can gather and discuss the scenario and other aspects of helicopter operations. Bring out a mirror and have someone describe mirror flashes, (6). Describe long line operations and the references in the IRPG. Talk about hand signals.
- What problems did you encounter with trust?
- Was this exercise useful?
Discussion Notes

Pre-Exercise:
- How does communication relate to trust?

- What would a team be without trust? How does it naturally occur and how do leaders implement it?

- What are problems with implementing it?

- How do we effectively communicate?

- What are examples of distrust and untrustworthiness?

Post-Exercise:
- What problems did you encounter with trust?

- Was this exercise useful?
Handcrew Medical Scenario

This scenario is designed to target the crew boss or crew boss trainee and EMT’s from a type I or type II handcrew. The scenario will facilitate the use of “incident within an incident,” patient assessment, patient transport, organization and delegation during a stressful incident, as well as the potential for physical exercise (depending on the location picked by the facilitators).

The facilitators for this scenario will need to pre plan and scout a suitable location for the scenario. It is recommended to utilize a moderate sized hill with the only “usable” medevac site on the top of the hill, and the injuries occurring at the base. The facilitators will also need to pre determine at least 3 frequencies (4 is best) for communication during simulation.

The remainder of the simulation can be adjusted or changed to meet the specific requirements of the crew conducting the scenario. It is estimated that the scenario will take approximately 2 hours to complete, give or take drive time to and from the scenario location, as well as distance from the injury site to the medevac site during the scenario.

Handcrew Medical Scenario

Location:
TBD by facilitators

Fire Name:
TBD by facilitators

Date:
TBD by facilitators

Frequencies:
- Crew- TBD
- Command- TBD
- Tac- TBD
- Air to Ground- TBD

Objective:
This scenario will serve as a “true to life” fire line medical event. It will attempt to promote the setup of “an incident within an incident”, use of the emergency care guidelines outlined in the IRPG, proper patient assessment, care, and transfer by crew EMT’s, as well as use of the medical incident report which is a new edition to the IRPG (2014).

Scenario:

The ___________ handcrew has been dispatched to a fire near the ____________. The fire is still in initial attack status and the crew is the only resource currently responding. Upon arriving on scene the crew is informed by the IC that the fire is approximately 10 acres with moderate spread potential. An order has been placed for additional ground resources as well as the local Type III helicopter, however due to the number of other fires currently going; it may be awhile before any relief arrives. The fire location is near the top of ___________ hill. The IC has informed the crew that he would like them to hike up the road to the fire location and come up with a game plan. The IC also tells the crew boss that he will update them on the arrival of any additional resources.

Medical Outline:

At the base of the __________ hill the IC will contact the crew boss asking for the use of one saw team to cut out a road that will help provide access for the engines when they arrive. The IC will give the saw team a location to meet him at to start the task, while the remainder of the crew heads up the road towards the previously determined fire location. Once the saw team arrives they will be informed by the on scene facilitator that both the sawyer and swamper have been hit by a rolling boulder. The sawyer has received a traumatic chest injury and is in and out of consciousness, and the swamper has been hit in the leg and has a lower leg bone break. Both patients will need to be transported to the top of _________ hill for medical transport.

Target Points for Simulation:

- Set up an “incident within an incident” facilitated by crew boss
- Involvement of all crew EMT’s in the patient assessment, initial treatment, and transportation to the medevac site
- Treatment for potential shock/internal bleeding to the unconscious patient by EMT’s
- Organization of tasks required by incident (medevac site, communication with transport ship, communication with IC, transport of patients)
- Separation from fire incident until medical is resolved (stoppage of suppression activities by crew)
- Utilization of the IRPG for emergency medical care guidelines, patient assessment, and the new medical incident report form
- Emphasis on the speed of getting the critical patient to the medevac site

Role Players:

Crew Boss- TBD by facilitators

The crew boss will lead the crew to the fire location and once the medical scenario begins become or delegate the role of the IC for the “incident within an incident”. They will have no prior knowledge of the scenario.
**IC- TBD by facilitators**

The IC will be the contact for the crew boss upon arrival at the parking site. They will direct the crew boss to hike into the fire location and inform them that other resources (engines and the local type III helicopter) have been ordered but no word on when they will arrive. When the crew reaches a predetermined location, the IC will call and request a saw team to help clear a road for when the engines arrive (ensure that desired saw team is sent). If the crew arrives at the fire location before the medical scenario begins then the IC will instruct them to send a small group to scout the fire while the rest stand by at the current location. Once the medical begins the IC will be there mainly as a contact to receive and relay information, as well as time frames for the arrival of the medevac ship.

**Air Attack/Medevac Ship- TBD by facilitators**

This role will mainly be used for communication from the medevac ship to the IC and crew boss.

**On Scene Facilitator- TBD by facilitators**

This person will be on scene at the medical. They will not answer questions unless it is vital to keeping the scenario in motion. If the scenario stalls or starts heading in the wrong direction, it will be the facilitator’s job to get it back on track.

**Unconscious Patient: TBD by facilitators**

Patient is hit in the chest with a large boulder. The patient is semi-conscious under initial assessment and then becomes unconscious. They will have no prior knowledge of the scenario.

**Broken Leg: TBD by facilitators**

This patient has a broken lower leg. They will be in large amounts of pain but will be second priority for patient transport. They will have no prior knowledge of the scenario.