

Island Fork Staff Ride

Facilitators Guide

Vision

Make firefighters more mindful of the risks associated with Initial Attack in hardwood leaf litter (FM-9).
Create a learning culture within the firefighting community.

- A staff ride for all levels of wildland firefighters
- A staff ride for municipal (structural) firefighters

Strategy

Preliminary Learning

- What is a Staff Ride?
- KDF Report of the Accident Investigation Team for the Island Fork Fire
- NIOSH Fire Report (99 F-14)

Preliminary Learning completed at Ice Breaker

- Island Fork video (YouTube)
- Mindful Management
- Reasons Swiss Cheese Model
- 5 Principles of High Reliability Organizations (HRO's)

Objectives

- Command and control/Gathering Situational Awareness
- Indicators of changing conditions/Fire Behavior Triangle
- Distractions/tunnel vision
- The Point of the time wedge
- Kenny and Kevin's Legacy/Changes to Organizational Culture
- Looking Forward/Take it Home

Organization

- Local Point of Contact: Jerry Wheelless
- Facilitator:
- Subject Matter Expert: Danny Blevins
- Logistics:

<u>Stand</u>	<u>Time</u>	<u>Theme</u>	<u>Location</u>
Stand 0	1130 - 1300	Icebreaker	Rt. 377 VFD
Stand 1	1330 - 1400	Command and Control/Situational Awareness	Island Fork Rd/Gate
Stand 2	1400 - 1430	Indicators of changing conditions/Fire Behavior Triangle	Creek Crossing
Stand 3	1430 - 1530	Distractions/Tunnel Vision	Leaf Blower
Stand 4	1530 - 1600	The Spear Point of Time Wedge	Rake in the tree
Stand 5	1600 - 1645	Kenny & Kevin's Legacy/Changes to Org Culture	Monument Site
Stand 6	1700 - 1830	Moving Forward/Integration Dinner	Rt. 377 VFD

Some of the concepts that we will cover at the icebreaker are: What is a staff ride, how they came to be, how we can benefit from them. Some of the seeds that we want to plant before we get out in the field are: What is mindfulness, Swiss Cheese Model, HRO's, and organizational culture (Reporting, Just, Flexible, Learning).

At Icebreaker: Remind everyone to bring a writing instrument with them to the field for mandatory writing exercises. If they wish to take notes they may want to bring a small pocket notebook.

Facilitators/SME's Important Reminder: Our role is to get the discussion going, keep it on track, and ask provocative questions... *MAKE SURE ALL OF THE PARTICIPANTS ARE INVOLVED IN THE DISCUSSION!*** If folks are trying to hide and check out, ***trunk monkey them back in!*****

Signifies TDG opportunity

Signifies facilitated discussion, teasing out ideas/discussion, pulling strings

Stand 1. Theme: Command and control/Gathering Situational Awareness

(Gate near point of origin; Local POC Leads) **1330 -1400**

TDG 1

*****Let participants know that there are no right or book answers at this point. *****

- **Question:** What does the theme of this stand mean to you?
- **Info:** April 6, 1999, 1630 hours. Morehead 911 dispatched Route 377 VFD to a brush fire off of Island Fork Road. Weather forecast for April 6, 1999: Mostly sunny skies, temperatures 67-72, relative humidity 40-45%, winds SW 10-25mph; precipitation no greater than .20" over a 17 day period from March 21-April 6th for a total of 1.16"; KBDI =77 (avg. for time of year); BI=43 (90%=51); ERC=23 (90%=31). Class 4 fire danger day. This was a very average day for spring fire season.
- **Info:** 1647 IC plus 10 personnel for Rt. 377 arrive on scene with one type 1 engine, one type 3 water tender (tanker in municipal terms) one type 7 brush truck.
- **SME Info:** IC's observations: Running brush fire, burning in leaf litter on a flat area, 2 to 3 acres in size, flame lengths of 1 to 2 feet. Fire was moving toward the base of the slope, generally away from the road. There was a single family dwelling with one outbuilding that was not in any immediate danger, however was of some concern and would have to be dealt with eventually.
- **Question:** You are the IC, what is the first thing that you would do? **Bread crumbs: SA, Briefing, weather, fuels, who's in charge, LCES, briefing???**
- **Question:** What can you do as the IC with the information that you have at this time? **What further information do you need?**
- **Question:** What tools do you have that can help you ensure that you've covered all the information you might need? **Incident organizers, unit logs, IRPG's, SOP acronyms**
- **Assessment Question:** Each participant has a yellow post-it note stuck to their participant guide. Tell participants: **You must now assume the role of IC and give direction to your resources; do this quickly and legibly please in the space provided on that post-it note.** Have them take a minute or so and write it out now. *****Pick several and read them to the group. *** Discuss answers.**
- **Question:** What time of day is it? **When do we typically have the most problems with wildfires?**
- **Question:** What risks are associated with your actions at this point?
- **Question:** What are your limits of acceptable risk?

Stand 2. Theme: Indicators of changing conditions/Fire Behavior Triangle

(Creek crossing; _____ Leads) **1400 - 1430**

TDG 2

Participants have photos of mature stand with open understory to represent the stand at the time of the incident. Also a photo of the needle freeze on a white pine from further up drain.

- **Question:** What does the theme of this stand mean to you?
- **Info:** 1654 hours. 7 firefighters have anchored on the road and beginning line construction with 6 hand tools and a leaf blower, improving an old logging road. 2 firefighters are deploying a hose lay from the type 1 engine for structure protection.
- **SME Info:** IC was at his vehicle and noticed that one minute that air was clear and clean, the next minute he couldn't see or breathe because of the smoke. This occurred multiple times over the next few minutes. He thought that it was a little windy that day. Nothing really super unusual, but a bit breezy.
- **Question:** One of you is the IC, another of you is the lead firefighter building line. Do you need to communicate with each other? If so, about what? **Bread crumbs: battling winds, fuels, topography, tactics. Make them talk like they would talk on the radio.**
- **Question:** Is there any change in the risk at this point?
- **Assessment Question:** Each participant has a yellow post-it note stuck to their participant guide. Tell participants: **As the IC, you must provide dispatch with an update at this time, in the space provided on that post-it note.** Have them take a minute or so and write it out now. ***Pick several and read them to the group.*** Discuss

Stand 3. Theme: Distractions/tunnel vision

(Leaf blower location; _____ Leads) **1430 - 1530**

TDG 3

- **Question:** What does the theme of this stand mean to you?
- **Info:** 1705 spot fires occur behind the crew constructing line, crew splits as 5 double back to work on the spot fires. 2 remaining crew members continue line construction forward with blower.
- **SME Info:** IC was notified via radio from the 5 crewmembers who went back to work on spots that a crewmember had broken a handtool and was coming back to the engine to get a new one.
- **Question:** One of you is the IC, tell the group your thoughts at this point. Concerns?
- **Question:** One of you is the leader of the group of 5 who went back to tend to the spots, tell the group your thoughts at this point. Concerns? **Emphasize the time crunch that they were under**
- **SME Info:** Within less than 2 minutes of splitting up, the 2 lead firefighter's leaf blower quits, and won't start. The IC was notified via radio that the blower might be out of gas.
- **Question:** You're the remaining 2 firefighters who are dealing with the broken down blower. What are your thoughts at this point? Concerns? **Bread Crumbs: Winds, weather, why are we getting spots, fire behavior, fuel change, topo change???**
- **Question:** What are you thinking about this broken blower? **Is the blower just a distraction at this point?**
- Talk about the time wedge here; they were anchored and beginning to cut line at around 1654 hrs. It's now only 1705... that's a difference of only 11 minutes... are things changing? Fast? Why?

- **Question:** You are the IC, would you do anything different tactically at this point? Why? Do you need to update dispatch given the situation? Fog of war, if participants say they are going to ask for stuff, make them talk like they would talk to dispatch.
- **Info:** At 1708, less than 15 minutes after engaging this incident, the fire blow up occurs, fire behavior increases exponentially, Kenny and Kevin are cut off from their escape route/SZ, they radio that they are hurt and in trouble.... ***Reports say between 1650-1735 this occurred, but in unknown order. We have gathered info from SME who were on scene to narrow this gap of time.***
- **Question:** You are watching area ignition, the fire has gone from routine to a firestorm in minutes; the entire bowl is blowing up right in front of your eyes... What would you do? Bread crumbs: Deploy, run, which way, where?
- **Question:** Put yourself now in the IC's shoes: what are you thinking and doing now? Bread crumbs: Rescue operations, 9 line, any medically trained personnel, activate EMS, medivac sites, LZ, IWI
- **Question:** Where is everybody else on the incident right now? Do you have any other resources on your incident? How do you track all of your resources on a rapidly evolving incident?
- **Question:** Who should you send to scout line? Best hiker? Best communicator? Bosses kid? IC? Does experience matter? Why? Remember what we said earlier about deference to expertise?

****This is the end of the TDG's for the staff ride. General discussion from this point, still facilitated on topic and within sideboards, trunk monkey to bring back if needed. ****

- **Stand 4. Theme: The Spear Point of the time wedge**

(Rake in the tree location; Danny Blevins Leads) 1530 - 1600

- **Question:** What does the theme of this stand mean to you?
- **SME Info:** Give participants information about the rake that was found here, and the speculation that they were using it to pull themselves up the hill with it.
- **Question:** Why do you think they were here?
- **Question:** Did only having one hand tool contribute to their situation?
- **Question:** Do you carry a hand tool with a blower or chainsaw? Of all the bad options, this is what was left...
- **SME Info:** Visual of fire behavior from ridgetop perspective from the Morehead Fire Department personnel

- **Stand 5. Theme: Kenny and Kevin's Legacy/Changes to Org. Culture**

(Monument site; Jerry Wheelless and Danny Blevins Lead) 1600 - 1645

Give folks a minute to gather at the Monument quietly

- **Question:** What does the theme of this stand mean to you?
- **Info:** Update from facilitator on actual fire conditions, estimated ROS 100-115 ft. per. min, which equates to 90-104 chains per hr.; flame lengths/depth 13 -20 ft., estimated 40 ft. near the ridgetop; the char height in the trees was 50 ft.; winds were steady at 14 with gusts to 35 mph. Fuel model/fire behavior prediction system was off the chart for this model, burned like a fuel model 2 as opposed to a fuel model 9.
- **SME Info:** Kenny and Kevin went an additional 300' above monument site, almost to the ridgetop. Talk about what you found.

- **Question:** So let's go back to our vision: Make firefighters more mindful of the risks associated with Initial Attack in hardwood leaf litter (FM-9). So were the risks significant here?
- **Question:** What are your limits of acceptable risk?
- **Question:** Can all the risk of firefighting be mitigated? Or in mitigating, are we just transferring that risk somewhere else?
- **Question:** Who can tell me what culture means to a firefighting organization? Values, principles, beliefs, approach, priorities, expectations, HRO's, Mindfulness
- **Question:** Is taking calculated risk part of our culture? And if so, can our culture be changed?
- **Question:** Can we ever accept the risk of losses?
- **Question:** Have you ever been told this job is **not** dangerous?
- **Question:** What has this fire changed about our culture?
- **Question:** What did South Canyon change about our culture? Yarnell Hill? Gatlinburg?
- **Question:** When do we stop learning? Is it when the official report comes out? Or when a new SOP is written? Or is it when our overhead tells us it's time to move on? Proof that a lesson is learned is when behavior is changed!

Tell participants before they leave that we have one more assignment for them...

Assignment: This is an individual assignment.

Question 1: What is **your** definition of risk?

Question 2: Has your vision of the risks associated with initial attack in leaf litter (Fuel Model 9) changed today, and if so why?

Question 3: Write down at least your top two risk factors associated with hardwood leaf litter that you're going to take away and use after today.

Question 4: List at least one thing that you personally are going to be more mindful about to help your department/squad/unit strengthen their "culture" in the future.

All participants will be expected to tell us one thing that they learned, or that stood out to them during the day today when we are at the integration dinner. As a participant you are not allowed to just say "what that guy said" so you should have several answers ready to go at a minimum. This experience is designed to get you thinking, and being mindful about your individual role as it relates to all aspects of wildland firefighting, firefighter safety, and leadership.

- **Stand 6. Theme: Looking Forward**

(Route 377 VFD; 1630-1730, Local POC leads)

- **Info:** Discuss as folks are finishing up their meal how the integration phase is intended to tie everything together. Discuss the writing assignments and go around the entire group to discuss that one thing that stood out to them today as well.
- **Take home assignment:** MOS Audit