Medevac: How We Got Here

By Alex Viktora

Here’s a fireline conversation I can’t imagine happening back in the 1990s (the yellow highlights indicate our more recent achievements and successes):

DIVS D: “Make sure to tie-in with your FEMPs down at DP 20. They’re from a big department in California. They have everything we might need, and they’re super experienced and ready to hike wherever. Also, there’s a REM Team that will be at DP 30, just a mile down from 20. They’re pretty dialed-in. They’ve got this crazy UTV that can transport, they’ve also got a wheeled litter, and they’re ready to do high- or low-angle rope work. Our Short-Haul helicopter is down at helibase, which is maybe a ten-minute flight from where you’ll be working today. I think the Short-Haul crew is from Grand Teton National Park. They’ve got all the Short-Haul stuff, a bunch of EMTs, and one Medic. Remember, we can Short-Haul a Green or Yellow, not just a Red. If you have a medical, get stuff moving to it, and make sure to use the 9-Line…uhm… I mean the 8-Line.”

Me: The Medical Incident Report, in the IRPG, right?
DIVS D: Yeah, that! It’s also in the IAP on the last page, so you don’t have to flip through the entire IAP novella to find it.

Me: Sweet. I think we’re good to go! Thanks!

A Basic Truth

WTF?

That’s a lotta jargon, and I love my jargons! (I sometimes joke that I get $1 for each acronym I use. Just check out the conversation above.) All this jargon—which will be spelled out and clarified in this piece—highlights a basic truth: Today we’ve got a ton of stuff. [Continued on page 3]
All the Good

Who has been to this operational briefing?

“Alright, listen up folks. Over here is a bunch of open line that is gonna bite us in the ass if we don’t deal with it, and over here is all the good work we have already done that I’m feeling pretty good with. FBAN says today should be pretty chill but there is a decent chance for active fire tomorrow. So I want to get out there and aggressively patrol that section that is looking good. Let’s take some time today to admire all that good work we have already done! On that other piece, the open back door, let’s just wait and see what happens. We can always hope things turn out OK. That’s the plan! See you at DP 13—right there where the WishInOneHand Road and CarInTheOther tie in.”

Nobody has been to that briefing!

Well, maybe a few of us have. But, hopefully, that is an outlier because that is not how we roll. We focus on where the work needs to get done and we get to work when we have the window.

So why am I even talking about this? I feel like I’m about to give a version of that briefing, and it feels kind of awkward.

It’s no secret that I tend to focus on the bad stuff. The stuff we need to get better at—our cultural shortcomings. I love to point out fire service blind spots and the overabundance of hypocrisy. I feel I have to zero in on that stuff because that is where the work is.

I also recognize that reading my rants with regularity one could come away with the impression that the fire service is one big mob of dirtbags collectively digging an ever deeper echo chamber to bumble around in chanting meaningless catch phrases to no one in particular. This is not the case. I need to acknowledge that. WE need to acknowledge that.

We Do Amazing Work

The wildland fire service is incredible. We are a collection high-quality individuals working to create and maintain high-quality teams and organizations. We do amazing work and we make ourselves better all the time. Here is a short list of relatively recent self-induced growth:

- We can use Unmanned Aircraft Systems (UAVs).
- Our boot diversity has exploded.
- Radios are smaller.
- Lunches have improved.
- Our maps are more functional and accessible (although they don’t fold up as well).
- We are better at planning for and dealing with medical emergencies on the fireline.
- We are better at recognizing and dealing with the impacts of trauma on our workforce.
- We have improved the way we treat firefighters when reviewing accidents.
- We have almost started to wrestle with outdated cultural norms around gender and power.

It’s no secret that I tend to focus on the bad stuff. The stuff we need to get better at—our cultural shortcomings.

Hesitant to Tout Success

And then the caveat. Remember this is a list of improvement. Progress does not mean perfection. Trust me, I have had plenty of bad lunches in the past few years. But a bad lunch in 2018 is a far cry from a bad lunch even five years ago (and they get worse the further back we go).

Why am I so hesitant to point to good stuff? Why does it feel a little awkward?

Maybe I’m afraid it will be interpreted as permission to stop working on whatever is mentioned. Maybe it feels a bit Pollyannaish—like I’ll be accused of rockin’ rose colored goggles. Maybe I’m just a pessimist. Or maybe I am the product of a culture that encourages a pre-occupation with failure. I think there is some research out there that says that is a good thing. I can’t remember exactly what it’s called but I think it somehow involves the words “High” and “Reliable.”

Whatever it is that makes me focus on the areas needing work and hesitant to tout success, doesn’t matter. The fact is we get better. That is what we do.

We should take a moment every so often to look back at all the good line we have put in, do a few fist bumps and have a snack (from our high calorie snack-packed lunch). And then get back to work.

Strong work, Toolswingers

By Travis Dotson
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[Continued from page 1] for fireline medical and rescue work.

Here’s a partial list of achievements and accomplishments—successful improvements—you might have the benefit of encountering on your next large fire assignment:

- FEMP (Fireline Paramedics. This pneumonic is unique to California. Other fireline qualified medical personnel are denoted in the NWCG’s “2018 Federal Wildland Fire Qualifications Supplement Guide”:
  https://www.nwcg.gov/sites/default/files/publications/historical/hist-federal-wildland-fire-qualifications-supplement-2018.pdf; and in this memo:

- REM (Rapid Extraction Modules, which come in various shapes and sizes). [See sidebar on page 5.]

- 8- or 9-Line Reports (officially known as the “Medical Incident Report” on pages 118-119 of the 2018 IRPG).

- Short-Haul Helicopters.

- And small but important things like the placement of the Medical Incident Report (see image below) at the back of the IRPG and, in some cases, at the back of IAPs. When someone’s bleeding, just flip to the back and call it in. (I know it’s not exactly that easy.)

Has it always been like this? The short answer is no. The long answer is, well, it’s longer.

The Fire Incidents that Provided Key Medevac Lessons
This particular story of medevac lessons and progress is filled with the names of fires like Dutch Creek, Deer Park, Las Conchas, Big Meadows, Freezeout, Strawberry and San Antonio. [See covers and dates—and embedded hyperlinks—of these fire’s associated incident reports on next page.] Some of these stories involve firefighter deaths; some of these stories were merely close calls; all of these stories involve chance and luck and each event is chock-full of lessons.

This story also includes boards of review, memos, “Pink Stickies”, 9-Lines, as well as lessons from the world of structural fire. Through it all, there’s never been a single effort or a single Incident Commander tasked with “fixing” the medevac problem. Countless efforts at different organizational levels and at different places around the country have contributed to this effort. Bucket by bucket, the tank is being filled.

A Complex, Tragic Story
To many of us, the fireline medical story begins with Dutch Creek. As a National Park Service employee and firefighter at the time, just like Andy Palmer, his death on this incident hit particularly close to home. I didn’t know Andy. I didn’t know his brother, Robert (a former firefighter as well), and I didn’t know anyone on the Eagle Fire in Northern California that afternoon.

But over the next decade, I came to know people who worked at Olympic National Park, Andy’s home unit. I even hired one of Andy’s coworkers to join our Module in Utah during the following (2009) season. Words like “golden hour” and “definitive medical care” started peppering our conversations about medical emergencies on the fireline.

The First Version of the 9-Line
As the conversation around fireline medical emergencies evolved, folks were eager for additional tools in the toolbox. It was in the Dutch Creek follow-up where one tool began to emerge, the “Dutch Creek Protocol”, which established a basic process and expectations for calling in medical incidents on large, IMT-managed fires.

It’s this memo that became the “Pink Sticker” [see image on next page]—almost literally a band-aid applied to the IRPG until 2014. That’s when the first version of the “9-Line” became part of the IRPG. Technically called the “Medical Incident Report” (MIR), this tool was
designed for firefighters—not just EMTs or ICs—to call in a size-up and get resources moving to the scene of a medical emergency. This tool was designed to be used on fires of all sizes, with incident communications and local dispatch units as well. While not perfect, this first version of the MIR was a major step forward from the basic stuff in the IRPG, and an improvement on the Dutch Creek Protocol.

As the Medical Incident Report began to be used, numerous lessons began to emerge on how medevacs actually take place, how preparation and training are critical to good medical response, and how to improve the MIR itself. New tools have come on scene. REMs and Short-Haul are among the most noteworthy.

Our Collective Medevac Journey
In the wake of Dutch Creek, other incidents shed light on where we were on our collective medevac journey. The 2010 “Deer Park Fire Hit By Rock FLA” (https://www.wildfirelessons.net/viewdocument/deer-park-fire-hit-b) (still one of my personal favorites) calls out some hard truths, right there on the cover of the report: “The organization is ethically and morally obligated to put an EMS program in place that is supported by the organization, and given the standardized training and equipment to make the program succeed.” The organization—in this case—is the United States Forest Service, which has been working to develop an agency-wide EMS program over the last several years.

Next, helicopter Short-Haul entered the wildland fire medical story in 2011, when a firefighter with a broken leg was short-hauled off the Las Conchas fire in New Mexico. At the Wildland Fire Lessons Learned Center (LLC), we thought this was such a big deal that we made a video to help spread the word and tell this success story. If you’re not familiar with Short-Haul, check this video out: “ROCK: Firefighter Extraction Success Story” https://www.youtube.com/watch?v=sinqJsUrYzE.

The effects of deliberate medical planning, combined with specialized equipment—in this case an Automated External Defibrillator (AED)—and a touch of luck, showed up in 2013 on the Big Meadows Fire at Rocky Mountain National Park. The Lessons Learned Review (https://www.wildfirelessons.net/viewdocument/big-meadow-medevac-2013) and eight videos produced to capture the lessons from this event are among the most thorough we’ve seen at the Lessons Learned Center. (This AED incident is discussed in the “One of Our Own” that starts on page 7.)


Throughout the last decade, a persistent reality occasionally emerges: firefighters sometimes have to innovate on the fly due to system-level shortcomings. If you don’t have a hammer, well, you can...
A History of Rapid Extraction Modules

Due to tragic events such as the 2008 Dutch Creek Incident, in which firefighter Andy Palmer lost his life, as well as persistent safety concerns regarding medical rescue in dangerous conditions in northern California and southern Oregon, Rapid Evacuation Modules (REM) were developed in 2012.

The topography, weather, and smoke conditions experienced on fires that year made the reliance on hoist or Short-Haul helicopters as the only means of firefighter rescue impractical. The REM provided an alternative form of rescue from steep/remote areas when aircraft was not an option.

In 2015 the Rapid Extraction Module concept gained more traction when FIRESCOPE in California published the Rapid Extraction Module Support Position Manual. The use of these modules in wildland fire was inspired by the Rapid Intervention Teams (RIT) in the structural fire world. (For some history on RIT, check this out.)

In September 2015, REMs were used on California’s Rough Fire (see the “Firefighter Pinned Beneath Burning Log Lessons Learned Review”). Over the next several years, a number of lessons emerged associated with REMs, several of which pointed to widely varying skillsets, equipment lists, and ordering procedures.

The 2017 “Rapid Extraction Module Support RLS” provides an excellent summary of the REM program. Written by Rebekah Fox and Dale Snyder of the PNW RLS Team, with support from the Pacific Northwest Coordination Group, this RLS reflects feedback gathered from members of Incident Management Teams and crews from multiple states assigned to fires in Oregon and Northern California. It is intended to communicate the ongoing efforts to aid in the safe and effective use of this module.

This RLS’s chapters include: “The History and Development of REMs,” “You Have REMs on Your Fire – Now What?” and “Best Practices Advice from Practicing REMs.”

Lessons and Takeaways

When I personally look at what has changed over the last ten years, I have some key thoughts and lessons that I think folks can take action on. Each of these is associated with a set of actions, and they’re examples of fruit you can reach. (See the Summer 2017 “Fruit We Can Reach” Two More Chains.)

1. **Practice Medical Responses.** This lesson has shown up in reports of all kinds, from Rapid Lesson Sharing documents to Accident Investigations and Facilitated Learning Analysis reports. Practicing medical emergencies can pay huge dividends. Whether it’s crew or module-level training; a drill conducted by an Incident Management Team; or a larger-scale scenario with a patient triage, agency and non-agency aircraft (with piles ignited to provide realistic effect).
   - A Related Lesson: Do medical training, refreshers and scenarios before you do stuff that could get you or your folks hurt. Things that can get you hurt are numerous, but some of the lessons we’ve seen that stress this order of operations include chainsaw and physical training.
   - A Second Related Lesson: Ensure that more than just crew leadership is ready to run a medical incident, because supervisors aren’t immune to being injured. (See: https://www.wildfirelessons.net/viewdocument/chainsaw-training-tree-injury-2012.)

2. **Get familiar with the tools in your medevac toolbox.** The things we have available to us will vary from fire to fire and Division to Division. If you find yourself in close proximity to a REM, tie-in and chat about what kind of gear and experience they have. If you can swing by the helibase and say hello to the Short-Haul folks, do the same. Ask them if your backboard will work in their Bauman

3. Medical responses can be traumatic events. Regardless of the eventual outcome, and even when “everything works out OK,” a medical response can have huge impacts on numerous groups. These impacts extend beyond those firefighters on the line who experience or witness an injury. This group also includes: those who help with the medical response (adjacent crews, helitack modules, ambulance crews, etc.), as well as folks who work in communications units or dispatch centers. (See the Summer 2018 “Are Our Dispatchers Exposed to Trauma?” Two More Chains https://www.wildfirelessons.net/viewdocument/two-more-chains-summer-2018.)

One of these events can be enough to send folks into tough places; several of these events could be unbearable. The lesson for all of us here is this: Watch out for each other. Lend an ear or a shoulder in the days, weeks or months after a medical emergency. If there’s a group that wants to get together around the fire pit to talk about the close-call, go for it. Also, it’s a good stroke to get familiar with some of the resources available to us. Peer Support and Employee Assistance Programs are just of few of the tools we might need to reach for.

Some folks would argue—I occasionally count myself as one of them—that all these improvements may actually be increasing (we sometimes say “enabling”) the types of risks we’re willing to engage our wildland firefighters with. Unless we’re very careful, these improvements—just like any safety or PPE improvement—could result in exposure to more hazards and different risks.

Final Thoughts
To wrap this up, here are a few final thoughts. Unlike the lessons above, these three noteworthy topics (below) are for you, for all of us, to discuss—and maybe even argue over. Translating discussion into action will be challenging.

1. There’s still some work to be done with regard to medical emergencies on the fireline. Here’s a sampling of the things that we still struggle with:
   - We still have a tough time talking to non-agency medevac aircraft. At the LLC, we’ve called this issue “Can’t Talk to Medevac” (we are genius namers, aren’t we?). We have a list of at least 11 reported incidents where communications between ground personnel and “Life Flight” aircraft were difficult or impossible.
   - Competition for resources like Short-Haul is high during peak fire season.
   - What exactly a “REM” (Rapid Extraction Module) is and how to reliably get one is still not widely standardized or even understood.

2. As wildland fire organizations expand their fireline medical programs, a critical question will need to be periodically addressed: Who is this service for? Is it just for firefighters and fire-support personnel? Is it for anyone who might need medical service? Depending on your perspective, this might be a simple question with a simple answer...or...not.

3. Some folks would argue—I occasionally count myself as one of them—that all these improvements may actually be increasing (we sometimes say “enabling”) the types of risks we’re willing to engage our wildland firefighters with. Unless we’re very careful, these improvements—just like any safety or PPE improvement—could result in exposure to more hazards and different risks. Here’s my favorite apropos comparisons:
   - Does a better football helmet prevent concussions? Or does it allow football players to hit harder, and actually cause more long-term damage?
   - Is it a good idea to put your shroud down when you’re close to active fire? Or, does the shroud allow you to stand too close to fire for too long?

All of these improvements (and those sure to come) are good news. I’d way rather get hurt on a fire today than 10 or 20 years ago. As we continue to get better, we need to keep having tough conversations about risk and hazard. Sometimes it will make sense to put folks in steep, rugged country, and add in extra lookouts, a REMs Team and a Short-Haul helicopter. (See the 2018 “San Antonio Tree Strike FLA [Water Flowing Uphill]”: https://www.wildfirelessons.net/viewdocument/san-antonio-fire-tree-strike-2018.)

In other situations, it might be best to get off the high ground and work where we’re closer to definitive care. Sometimes these situations align with operational objectives, but involve other trade-offs. The process of solving the dilemma of when, where and how to engage our firefighters should—every time—include this significant consideration:

Just as with any other safety measure, we must always be diligent in asking ourselves if our risk mitigation efforts enable, mitigate, or transfer risk.
Mike Lewelling is the Fire Management Officer at Rocky Mountain National Park. He manages a complex program and has an important perspective on growth and change in the wildland fire service to offer us.

Is the Wildland Fire Service Better Off than it was Ten Years Ago?

By Travis Dotson

TRAVIS: Is the wildland fire service better off than it was ten years ago?

MIKE: I’m so divided on that question. I see positives and negatives. If we’re talking about medical response, yes definitely we’re better off than we were 10 years ago. But it doesn’t matter where I go, who I talk to, everybody is talking about HR and the difficulty in hiring and how that is diluting our pool of professional people that we want. And then there is budgets, changing priorities from the top, and other things like that. So, are we better off than 10 years ago? It depends on what angle you’re looking at it from.

TRAVIS: Give me an example of the good and bad.

MIKE: One of the things as far as risk management goes is just the significant difference in perspectives and approaches between IMTs. There was a fire recently where the very first team got with the Agency Administrator (AA) and the AA said “We are
not going into the timber. Trees are falling over for no reason. There is serious risk of people getting killed. We’re not going into the timber.”

Some hotshot crews looked at it and said “Oh man, if we can just dig this line right here, we can cut it off.” But the AA stuck to their guns. They said “No, it’s OK if it burns, it’s going to come out. We’ll wait for it.”

So another team comes in and it’s the same. A subsequent team was more aggressive and said “You know what, we can get through this and put this out.”

There is story after story of just the differences in teams and how critical it is for AAs to maintain consistency in team transitions. Two or four months into a fire, the home unit gets tired of the fire and eventually gets a team who says “We can put this thing to bed.”

TRAVIS: Yeah, we don’t control what team shows up in the rotation. The aggressive team could have shown up first. And it’s totally fair that local units get tired of dealing with a fire. That variation in styles might not be something we can eliminate, but we can improve how it is we prepare our workforce, including Agency Administrators.

MIKE: I am impressed with how our involvement with AAs is changing. I was able to be a part of the M-582 (Fire Program Management; Leading Complex Fire Programs) cadre as a table coach and it’s very interesting to see the different levels of Agency Administrators that are coming up. There’s some that have absolutely no fire experience and some that have a ton—and I don’t know which one’s better!

Agency Administrators also need their own team of people helping to make these risk management decisions so they don’t just hand the fire and all the decisions to the IMT. The concept of “Shared Risk” is vital to the decision-making.

TRAVIS: Is that progress? The way that we acknowledge the Agency Administrator’s role and our efforts to educate both our fire workforce and Agency Administrators on the process?

MIKE: Absolutely. I would definitely say that I’m real impressed with the new M-582. They include a Cerro Grande site visit in the course. The Agency Administrators come out of there going “Wow, that was actually worth it for a week.” You try to get an Agency Administrator to go to a week-long training—it better be good.

Agency Administrators also need their own team of people helping to make these risk management decisions so they don’t just hand the fire and all the decisions to the IMT.

TRAVIS: That feels like progress—we have Agency Administrators going on site visits! But getting back to the areas that we can’t put in the “progress” pile. Do you have hope for us getting better at things like hiring?

MIKE: Honestly, no. I don’t have much hope. It’s been five years of “Oh, it’s going to be better.” And yet every year, it gets worse. We’re eating ourselves from within.

Whether it’s how we have to reconcile our credit cards to how we do travel to how we hire, each of these processes operate as a silo and there’s no consideration of how they impact each other or the whole. We are supposed to hire the best and brightest for a more professional, educated workforce that can make better risk decisions. It’s becoming more and more difficult to make that happen. And it is connected to risk!

TRAVIS: Sure. Say a bad thing happens on the fireline. Someone gets hurt. People often ask: “What risk decisions were made prior to and at what capacity do those decision-makers operate? What kind of training do they have?” and so on. Seems like you can draw a pretty straight line to hiring.

MIKE: Absolutely. One of the foundational considerations when evaluating a high-risk mission is team selection. You want the best team that you can get. If you don’t have much to pick from, you might be in trouble.
Medical Emergency Response

TRAVIS: Getting specific on the medical emergency response, tell us a little bit about your experience and background with that element.

MIKE: Here in the Park we have always had some sort of plan. Like “OK, if somebody gets hurt, we’re going to get them out of there.” But we never really dialed it in—like exactly what are we going to do? Being able to answer the questions that got put in the IRPG after the Andy Palmer incident: [https://www.wildfirelessons.net/viewdocument/dutch-creek-tree-fe]  

- What will we do if someone gets hurt?
- How are we going to get them out of here?
- How long will it take to get them to a hospital?

On the Big Meadows Fire in 2013, we ordered an Incident Management Team and we were all trying to figure out the “Dutch Creek Protocol” together. We did all kinds of stuff that probably never would have happened in the past as far as EMTs, Paramedics on-site because it’s a very remote fire.

And you wouldn’t expect it, but we had a hotshot go down with sudden cardiac arrest! They were hiking to the line from spike camp and boom! They had an AED to him within minutes and they successfully restarted his heart and brought him back to life. 10 years ago, we would not have had an AED on the fireline.

And there’s nothing like sitting in ICP, hearing a call come in saying “no pulse, not breathing” and instantly, I know what that means. And I know that person is not going to survive and sure enough, “Paramedic on scene”—with AED. And they brought him back to life and he fought fire the next year.

That was an absolute life saved, no question. And no question it was attributed to changes made after the Andy Palmer incident.

TRAVIS: Wow. I remember hearing about that Big Meadows Fire incident and what I kept saying to anybody who would listen was “They had an AED in spike camp!” When I’m loading up for spike camp, I’ve never to this day said “Make sure the AED is in there.” I just don’t think that way.

MIKE: Yeah, no kidding. And really, I mean even to this day, it’s very common to NOT have an AED in spike camp.

I think about risk a lot. I was recently thinking about the term “luck”. The definition of luck is very similar to risk. And I wrote it down: “Success apparently brought on by chance rather than one’s own actions.”

I don’t think we’re going to be studying “luck” anymore. Whereas with “luck” we are more able to accept as is—whether good or bad.

MIKE: “Are you good or lucky?” A lot of people lean on that. I think it’s a great parallel to draw between luck and risk. It comes into play with blame as well. If something goes bad and we are thinking about “risk” it is somehow easier to assign blame. Whereas with “luck” we are more able to accept as is—whether good or bad.

MIKE: Yes, absolutely.

TRAVIS: Do you have any other personal experiences that have shaped your perspective on this?

MIKE: Yes. The San Antonio Fire [https://www.wildfirelessons.net/viewdocument/san-antonio-fire-tree-strike-2018]. I was the lead for the FLA. What really stuck out to me for that one was: “How do you choose between multiple unsafe options?” The Type 3 Incident Management Team, the two Agency Administrators, hotshot crews, they all got together and looked at options for this fire and there was not a safe option to be had.

Every fire has some kind of risk. But this fire had high risk no matter what choice you took. Going direct, you’re going down in a hole, in timber, super steep slopes—not ideal. But going indirect was way worse. A lot more people at risk.

TRAVIS: And they’re also doing that in the shadow of a community that has some pretty vivid memories of big bad fires—the Cerro Grande Fire and the Los Conchas Fire (both located outside Los Alamos, New Mexico).

MIKE: Absolutely. So on the San Antonio Fire some weather came in and it kind of parked the fire for a bit, giving them a chance to catch it small. But in doing so, when they decided that they were going to do a high-risk operation, they were like “OK, how can we mitigate some of the risk?”

And there’s nothing like sitting in ICP, hearing a call come in saying “no pulse, not breathing” and instantly, I know what that means.

That was an absolute life saved, no question. And no question it was attributed to changes made after the Andy Palmer incident.
They had four hotshot crews. They ordered a REMs (Rapid Extraction Module) team. They had the helicopter with short haul capabilities. They got prepared. Then two guys get hit on the head by a limb!

Those 60 hotshots packaged both patients and got them out before the REMs even had time to set up. They prepared because they knew they were going into a risky situation.

TRAVIS: Compare that scenario to a similar one pre-Dutch Creek (Andy Palmer’s tragedy incident). I feel like that looks different.

MIKE: Yes, I think it would be more like: “Hey, let’s go direct on this and we’ll just get after it.”

And the hotshot superintendents I know, they’re all for it. It’s not “Oh man, we’re being forced to put this ‘mitigation’ in place.” It’s more like “Hey, if one of my people gets hurt, I want to know that I can get them out.” Sometimes you get policies or procedures in place and people are kind of negative about it. But I haven’t heard too much negative chatter on this. We all want to take care of our people.

TRAVIS: Some folks debate the process, whether we should be using a military style “nine line” or the current “eight line” version. Should it be geared toward treatment or transport? Should it be standardized or let IMTs each have their own? That is the stuff folks nitpick. But I think you are right. Everybody is on the same page about if we’re going to put somebody out there and ask them to do the dangerous work, let’s be prepared to support them when the bad thing happens. And to me, one of the big changes is using the word when rather than if the bad thing happens.

MIKE: Absolutely. We had a fire this summer and I was flying over it. It was kind of a “peninsula of fuel” and there’s only about a quarter mile of line that needed to be cut.

Sometimes you get policies or procedures in place and people are kind of negative about it. But I haven’t heard too much negative chatter on this. We all want to take care of our people.

If we didn’t cut that quarter-mile line, it would have turned into a rest-of-the-summer fire because it was going into an area that there is no way we could send people. And so during the briefing, we acknowledged this situation. We only have a quarter mile to cut but there are snags. There’s beetle-kill through there and it is a high-risk situation.

I trust the people who are going to be up there making the final decision. So once you get up there, make the decision about whether you can go for it or not. But just know that by this one high-risk operation, it’s going to save two months of additional high-risk operations and a lot more people at risk.

And we got some good feedback from the people who went up there. They said: “Thanks for setting the stage for us.”

TRAVIS: Sure, enabling them to make an informed decision with support and the capacity to respond. And acknowledging that, yes, somebody could get bonked out here and everybody is on the same page about that. I think that is difficult for some managers.

MIKE: Yes, absolutely. For managers to fully appreciate the risk and if the folks don’t want to do it, they’re fully supported.

TRAVIS: Yeah, on the operator end, if you decide not to go in, it’s almost like knowing you will have moral support. But if you DO decide to go ahead with the mission, it’s like having physical support: knowing we have a dialed-in medical plan and the capacity. There’s a ship on call and we know the phone number and we know the helicopter is actually sitting there on the pad, that kind of stuff.

MIKE: Yes, absolutely.

TRAVIS: In the past, it was more of “Let’s go for it.” And it feels like a lot of that was just based on hope. Let’s hope no one gets hurt. Let’s hope nothing bad happens. I mean, it wasn’t exactly like that, but a lot of the attitude was just like, hey, man, that’s what we do. We deal with the unknown and if the bad thing happens to be somebody gets hurt, trust us, we’ll deal with it. We’ll improvise. And we did good a lot of times.
MIKE: Until we didn't. Until it took two hours to get someone onto a helicopter.

TRAVIS: Unfortunately, that's kind of how the fire service tends to do it's learning. So what are some other ways that we still need to improve in this area?

What We Still Need to Improve

MIKE: Well, I think just an overall support of the medical and evacuation mission. We kind of piecemeal it together right now. When hiring, our hotshot crews may think “Oh sweet, this person's an EMT!” Or we say “Hey, let’s order a REMs module” or something along those lines. We don’t have actual positions, not like “We’re going to hire you and you’re going to be a GS 6 instead of a 5 because you’re an EMT”—or be able to provide that kind of training. As a whole, the firefighting machine does not support it. It's not funded or incentivized.

TRAVIS: Yes, hiring by hope: “I hope an EMT applied this year.”

MIKE: Right. And beyond that, maybe even improving the whole REMs. I’m not sold on that whole concept yet. But I think it’s good to invest in it and give it an honest try.

TRAVIS: On the REMs, I feel like we are at the beginning and it needs time to improve. It’s still more of an “idea” and people are adapting gear that was meant for other stuff to fit our situation. Eventually, we’re going to get to the point where we’re making situation-specific gear and protocols—that stuff just takes time.

I mean, five or eight years ago you could literally say the words “Rapid Extraction Module” and most people would ask: “What are you talking about?”

On the EMT and Paramedic front, there’s a lot of people feeling like “Hey, if we’re going to step into this realm and we really are going to take care of our own out there, then where is the agency sponsored EMT and Paramedic training?”

MIKE: Yes, absolutely. And then comes the debate: Are we a wildland fire service, or are we an emergency response service? Everything is complicated.

Biggest Positive Changes?

TRAVIS: Overall, what would you say are the biggest positive changes you’ve seen in our culture during your entire career?

MIKE: I think we are more mindful about how we manage fires now. I saw a map side-by-side of all the fires from the early 80s into the 90s and it’s all these little pinpricks of fires. And then you go into the 2000s to now and the footprints are a lot bigger. There’s a lot that goes into that. But I think part of that is not always throwing everything at every fire. Mother Nature uses fire to clean house and it doesn’t matter what we do, she's going to do it eventually. So whether we put ourselves in the way of that or let it happen is an important decision. I think that, overall, risk management—how we respond to fires—is a significant advance.

TRAVIS: For sure. I've seen research showing that the best investment we can make is big fire footprints. That is what ends up being both a money saver and exposure saver down the line as well as an ecological investment, obviously. For so long, large fire footprints were only being pushed from an ecological perspective and now we’re talking about the risk benefits of changing our default setting away from just crush it. There is often an immediate and future benefit on the risk front (less exposure now AND a larger footprint reducing future threat).

MIKE: Yes. Absolutely. And every fire is different. Every day on every fire is different. And so you can’t make a blanket statement. And it’s tough. Around Rocky [Rocky Mountain National Park] we’re trying to set the stage with the public that, we’ve got beetle-killed lodgepole that goes right up to the Park boundary and we have communities down the gun barrel where we frequently have 70 mile-an-hour winds. As the Fire Management Officer, we have got to think outside the box about preparing. It’s no different than preparing for a hurricane or a tornado or a volcanic eruption. If you live where the natural event happens, you need to be prepared for it.

As the Fire Management Officer, we have got to think outside the box about preparing. It’s no different than preparing for a hurricane or a tornado or a volcanic eruption. If you live where the natural event happens, you need to be prepared for it.

TRAVIS: Do you feel you have the capacity and the support to get better at that kind of planning?
MIKE: Certainly for fire response, getting the word out there that we are not going to be able to send firefighters into the middle of a beetle-killed forest. I’ve got a couple photos that help sometimes. I compare a green healthy lodgepole forest in which I wouldn’t hesitate to send people hiking three or four miles into that forest to put a fire out. [See Photo 1.] And then I’ve got a current picture of this jack-straw nasty mess. [See Photo 2.] Imagine sending people through that when trees are falling for no reason? And so we’re slowly telling the story.

TRAVIS: Alright, that is all super good perspective and information. Now for the most important: What is the goofiest fire-related event you can recall?

MIKE: Oh man, there have been a few. This one sticks out: I was dropping ping-pong balls at Whiskeytown. I was front seat. Before we took off, I was joking about getting airsick. I said: “I got my puke bag!” So I had my puke bag in my pocket and we’re flying and we’re dropping ping-pong balls and the pilot goes, “Hey, you got that puke bag?” I looked at him and I kind of laugh. I’m like, “Well, yes, but I’m good.” He’s like, “No, give it to me!” And I’m like, OK.

And so I gave him my puke bag and he starts hurling as we’re flying. You know how your body kind of convulses when you puke? He somehow bumped the controls and we just come screaming out of the unit. And thankfully, the PSD operator stopped dropping balls in the back. But yeah, he puked all over the place and then of course my puke bag had holes in it and so he hands it back to me and his pukes drip all over my legs. We ended up flying back over the fire and dropped the puke into the fire.

So, that was kind of goofy.

TRAVIS: You cannot make that stuff up.

MIKE: And it wasn’t that he was airsick, it was food poisoning or something. I don’t know how you can puke and fly at the same time. I’m glad we didn’t crash.

TRAVIS: Dropping ping-pong balls with a puking pilot—classic.

Do you have anything else on this whole topic of “growth” that you had other thoughts on?

MIKE: I guess just the whole learning process. Moving away from punitive, how that circles back around to risk management. I’ll never forget one of our NPS leaders throwing all of my friends under the bus during Cerro Grande and just how ugly that was. And from experiencing that to now, being able to be involved in some of the FLAs. I know that it’s definitely more of a learning environment now. For me, that’s been huge.

TRAVIS: Yes, for sure. In terms of progress, in general, I feel like we treat people better, specifically those who have been involved in some sort of really bad outcome.

MIKE: I agree. I feel like sometimes you wake up and you have the best intentions for the day and the bad thing happens and it changes your career—and even your life.

TRAVIS: And when that day happens to someone other than us, man, wouldn’t we want to be supportive and try to get some good out of it? Because that’s going to happen to them no matter what, their career/life is going to change. Now, what are we going to do to treat them and ourselves as “brothers and sisters” since we’re so fond of using that term?

MIKE: Yes. You’ve got to mean it.
The Student of Fire Era

By Paul Keller

For four seasons, from 1986-1989, I was a member of the Zigzag Hotshot Crew, based on the Mount Hood National Forest’s Zigzag Ranger District in Oregon. Paul Gleason was our Superintendent, a position he had held since 1979.

I live in the Zigzag area on Mount Hood’s west side. Back in the 1980s, I therefore knew of the Zigzag Hotshots and their long history. I was honored to become part of this family of firefighters.

At first, after leaving the crew and continuing my career in fire elsewhere, I was aware of the Zigzag Hotshots, their personnel, and their activities. But down through that swift river of the years, even though I still lived in the Zigzag area, I, unfortunately, eventually lost all contact with the crew.

This same void of connection applied to the other many alumni who had also once served on the Zigzag Hotshots before and after me.

Long Overdue
Enter Devin Parks.

Thankfully, Devin, now in his second year as Zigzag Hotshot Superintendent, wanted past crew “old-timers”—like me—to get together and break bread with today’s Zigzag Hotshot Crew.

On a Friday in April—at the end of Zigzag’s first week back in operation this season—Devin and his crew hosted a barbeque lunch for past crew members.

No one had ever done such a thing before. Turns out, this “family” reunion was long overdue.

As Devin explained in his electronic invite that was spread far and wide a few weeks before the event, “The intent of this gathering is to connect the current crew with those who have served as Zigzag Hotshots throughout our proud history. This is a great opportunity to pass down our history to the newest generation of Zigzag Hotshots, as well as to learn about these incredibly talented individuals who are carrying our program into the future.”

Good Vibe
The word successfully got out to former Zigzag crew members. A total of 20 of us—from various eras—returned to Zigzag that day to attend the barbeque. (Hans Redinger, a former Zigzag Hotshot Assistant Supt., probably traveled the farthest, making the 220-mile drive down from Washington’s Snoqualmie Ranger District, where Hans is Fire Management Officer.)

As soon as I arrived, I joined in with a group of folks—both former and current crew members—who were shooting the bull, laughing, and probing each other with various questions. I looked around and quickly realized that these informal cross-generational conversations were bubbling up everywhere.

There was an unmistakable good, communal vibe resonating in the air.

Those of us who had been on the crew during the “Gleason Era” were asked questions about Gleason. While much has been written and documented about this wildland fire legend—whose life was taken by colon cancer in 2003—those of us who worked on Paul’s hotshot crew shared some little-known inside scoops with the current Zigzag Hotshots. Call it: “family history.”

For instance, the crew headquarters. Us old-timers were blown away by the crew’s current home base, located in a completely refurbished one-time two-story fire warehouse behind the Zigzag District’s main office facility. We admired the crew’s overhead offices and their spiffy classroom training area.

Gleason was a maverick. Rather than be tied to that main district office facility (where he did have a desk beside the FMO’s desk) he preferred he and his crew to go more guerilla. Ten miles up the highway, in a remote Forest Service compound that then included a parking lot and three historic cabins (Gleason lived in one of them), is where Gleason’s crew reported for work—right there in that gravel parking lot. Yep. (If we needed to go indoors for training, we used a meeting room down the hill at the Zigzag Ranger Station.)

Today, in the Zigzag Hotshot Crew’s indoor training area the wall is lined with several crew photos from numerous years. You’ll find Paul Gleason in just one of these—the 1991 crew, Gleason’s last year here. (After 12 years as Zigzag’s Supt. Paul transferred to Colorado’s Arapaho-Roosevelt National Forest to be a District FMO in 1992.) So where are the other 11 “Gleason” years’ annual crew photos? Sorry folks. There aren’t any. Like we explained to the current crew members at the barbecue, Gleason was a maverick.

Sure, back in the day we trained, too. But it was the Dark Ages compared to the Student of Fire era that is obviously alive and well on today’s Zigzag Hotshot Crew.
The old and the new. Devin Parks, Superintendent of the Zigzag Hotshot Crew (pictured second from right), had his crew host a barbeque in April for past crew members “to connect the current crew with those who have served as Zigzag Hotshots throughout our proud history.”

and a guerilla Superintendent. Except for that one 1991 exception, we never took official crew photos. It was good to pass on this “inside” family history to Zigzag’s current crew.

**Super Hosts**

Today’s Zigzag Hotshot Crew were super hosts. They provided all of us with delicious hamburgers, brauts, salad, desserts and refreshments.

After chowing down and continuing to brew good conversations between the “old” and the “new” we all gathered into one big circle. Superintendent Devin thanked us alumni for traveling to and attending this special gathering. We then went around and everyone had an opportunity to introduce themselves and say whatever they wanted.

I was truly impressed with the current crew members. As they spoke, it became apparent to me that a beneficial cultural change has transpired and become ingrained since I put down my pulaski 29 years ago. These folks get the “big picture”. They read and study RLS’s and FLA’s and train, train, train. Sure, back in the day we trained, too. But it was the Dark Ages compared to the Student of Fire era that is obviously alive and well on today’s Zigzag Hotshot Crew.

At the same time, it was so good to learn that many traditions continue. Today’s Zigzag Hotshot Crew members obviously love interfacing with wildland fire just as we once did before them. And these current folks PT just like we did, too—humping up that dreaded super-steep Hunchback Ridge. Yes!

I also got a really strong cohesive vibe from this tight crew of wildland firefighters. As a former Zigzag Hotshot, they made me proud. After our introductions and reflections were over, we all gathered up for a group “family” photo. We then continued our sharing in a celebration of ongoing conversations. The barbeque was supposed to be over at 1300. But our mutual, combined energy powered it on long after that time.

Here’s my recommendation. If you’re on an established crew who hasn’t reached out to your alumni for quite a while, you might consider doing so. I can guarantee you, it will be a win-win.

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**Join the Conversation**


**Please Provide Us with Your Input on this Issue of Two More Chains**

Three Individuals and One Group Receive Annual Paul Gleason Lead by Example Award

It was recently announced that three individuals and one group from across the wildland fire service have been chosen to receive the national 2018 Paul Gleason Lead by Example Award.

This annual Paul Gleason Lead by Example Award was created by the National Wildfire Coordinating Group (NWCG) Leadership Subcommittee to remember the late Paul Gleason’s contributions to the wildland fire service. In 2003 we lost Paul to colon cancer. During a career spanning four decades, Paul was a dedicated student of fire, a teacher of fire, and a leader of firefighters. The intent of this award is to recognize individuals or groups who exhibit this same spirit and who exemplify the wildland fire leadership values and principles.

Kimberly Lightley

Kimberly Lightley, Critical Incident Specialist for the U.S. Forest Service, is recognized for her support of the Wildland Fire Leadership Development Program and her “demonstration of motivation and vision”.

Among Kimberly’s many accomplishments is her development of the “Stress First Aid Program” for wildland firefighting. As a survivor of the 1994 South Canyon Fire tragedy, Kimberly’s exemplary leadership and bravery to lead up and bring the insufficiencies in how we care for each other following critical incident and stressful situations to light at the highest levels of leadership is commendable.

The lessons Kimberly learned from her experience will become the foundation so future employees—regardless of agency—will not have to navigate the path of healing on their own.

Kim Kelly

Kim Kelly, Fire Ecologist with the Bureau of Indian Affairs Northwest Regional Office, is recognized for her support of the Wildland Fire Leadership Development Program and her “demonstration of motivation and vision”.

Kim is acknowledged for her strong leadership and unwavering pursuit to improve the health and safety of all Native American employees, especially Tribal employees. Her efforts to bring Office of Workers’ Compensation Programs (OWCP) coverage to Tribal employees outside the scope of suppression is especially commendable.

She is also recognized for her professionalism and the compassion she has provided to individuals and families working through the administrative functions of health care.

Peter Barry

Peter Barry, an instructor/consultant with Colorado State University (CSU) and an employee of the Colorado State Forest Service, is recognized for his support of the Wildland Fire Leadership Development Program and demonstrating “mentoring and teamwork”.

Peter is acknowledged for his involvement and mentorship of the Student of Fire Initiative at Colorado State University. “Peter’s efforts to advance Paul Gleason’s vision that firefighters realize the importance of being a student of fire are commendable,” said John Wood, Co-Chair of the NWCG Leadership Subcommittee. “Creation and continued support of the CSU Student Firefighter Association, securing lasting funding for the Paul Gleason Scholarship, as well as connecting students studying wildfire science with land management agencies and fire departments directly aligns with that vision. Peter’s influence will be realized for years to come.”

The Boise Helitack Crew

The Boise Helitack Crew is recognized for its work in support of the Wildland Fire Leadership Development Program, demonstrating “initiative and innovation”.

The crew is acknowledged for its leadership to implement the Sikorsky UH-60 Black Hawk program into the initial attack environment. “Your crew’s vision and constant motivation to see the program come into its full potential in spite of delays and challenges is the epitome of resilience,” said John Wood, Co-Chair of the NWCG Leadership Subcommittee. “Because of your initiative and innovation, a new aviation platform for fire suppression is on the horizon for the entire wildland fire service.”