

TWO MORE CHAINS



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Yarnell Hill Fire Aftermath

By now, most of you have seen the [Yarnell Hill Fire Investigation Report and Briefing Video](#). As our fire season winds down, we will have more time to really think about and try to process what happened to Granite Mountain. I want to share a recent quote with you from a Hotshot Captain: *“Part of why we have a hard time with grief is that fires occur and we have to focus on the here and now, compartmentalize now, deal with the issue later.”* This winter, as we start dealing with the grief, please ensure that we all continue to [“Take Care of Our Own”](#) and watch out for each other.

Brit Rosso, Center Manager

AARs: Why Do We Do Them?

By Travis Dotson

Have you ever been through an After Action Review that was a waste of time?

Have you been to the AAR where you blaze through the process:

- ✓ **“What was the plan?”** – *To mop up.*
- ✓ **“What actually happened?”** – *We mopped up.*
- ✓ **“Why did it happen?”** – *Because that was the plan.*
- ✓ **“What can we do better next time?”** – *Mop up more.*



Original photo by Kari Greer (tweaked—with her permission—by Two More Chains)

Or experienced the AAR where the person “facilitating” talks the whole time and tells everyone their view of the situation? Or the one where it’s all complaints and finger-pointing and everyone leaves angry? How about the one where you talk about everything but what *really* needs to be talked about (the dance around the issues AAR)? Or what about the most frustrating one? That would be the AAR where really good dialogue and ideas are generated—but on the next operation, nothing has changed. **[Continued on Page 3]**

[Please Provide Us with Your Input](#)



bit.ly/2mcfedback

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GROUND TRUTHS

By Travis Dotson
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Just Three Things

Have you ever been part of a complex operation that did not need to be complex? Have you ever had someone describe the plan and at the end you ask: "Can't we just drag fire from here to there?" How many times do we make things more complicated than they need to be? In my experience, pretty often.

We love to warn others never to have a plan that relies on Aviation, but we do it all too often. We love to figure out ways to "get down in there and put this thing to bed" while we scrape together some convoluted triple-step medivac plan to "mitigate risk." We love to order masticators, feller-bunchers, and heavy-duty chippers to "prep" a narrow mid-slope mountain road and "pre-treat" the green with monsters of metal in the sky to justify an ill-advised burn show in horrible conditions. And no one is surprised when it doesn't work. "Worth a shot," we say.

How About . . .

Yep, we love complicated plans. How about: "We are going to wait until the fire comes down into the grass country and then burn these roads out at night"? Simple.

What does that require? Patience. This is something else we struggle with. Have you ever begun a firing operation at an inopportune time because "we need to complete it in one shift"? Have you ever dropped a snag you could just avoid? Have you ever gone direct because it would "take too long" for the fire to get to the good ground? Not to mention cussing about the line for chow, fuel, demob, or blue saunas at camp. Ahhhh, patience, how you elude us.

I'm all about a bias for action, but not action for the sake of action. Sometimes the sound and timely decision is simply to wait. As much practice as we get (hurry up and...?), you would think we'd be better at it.

And then there's Compassion.

Vocabulary.com says: "When you have compassion, you're putting yourself in someone else's shoes and really feeling for them."

Do you give to the Wildland Firefighter Foundation? Of course you do. We are extremely compassionate in relation to the fallen.

Extending Our Compassion

But do we extend that same compassion to daily interactions? How do you treat the rookie who really is suffering because they have never been away from home for two weeks? How do you react when someone is scared of a situation you are accustomed to? What are your assumptions when you hear about an engine crew from a different organization being entrapped? My first reaction to any of these situations is not always compassion. It's often annoyance, eye-rolling, and condescending comments. Those reactions are weak.

I especially take issue with how we react to news of accidents or incidents. We judge immediately. We distance ourselves by saying things like "C'mon! Back to basics!", "What were they thinking?", and "Classic loss of Situation

Awareness!". All of that is just us trying to convince ourselves we would never be caught in that particular situation, that we are "better" and therefore safe.

How Would You Be Feeling?

Compassion would have you identify with those involved, assume similarities—not differences. Think about how they are feeling and how they are treating themselves at this point. How would you be feeling if it was you?

Compassion is the first step to truly learning. It's why good Staff Rides work. It's the moment of realizing "this could have been me" that opens you up to seeing how things actually happen and how decisions really get made.

That's when real questions start. That's when new ground is covered. Don't get caught up in the tired old rhetoric of "should have"—it's useless.

Just three things: Simplicity, Patience, and Compassion.

Dig deep, Tool Swingers.

"I have just three things to teach: simplicity, patience, compassion. These three are your greatest treasures."

—Lao Tzu

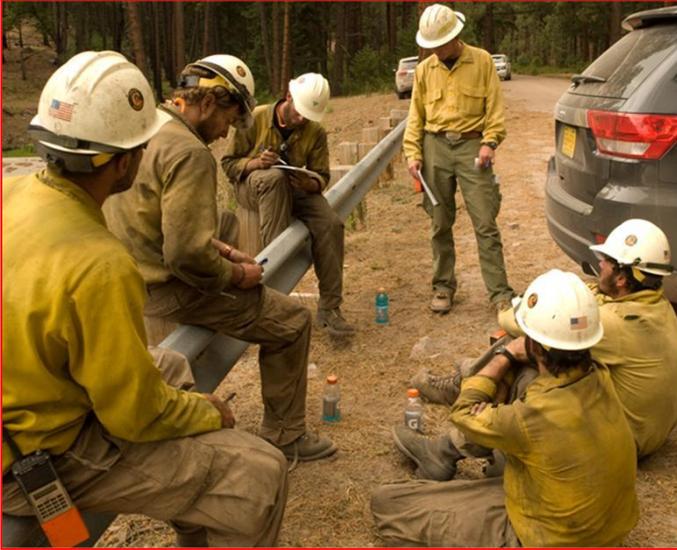


Photo by Kari Greer

[Continued from Page 1]

Yes, we have all been to those AARs—too many times. Why? How have we taken this awesome tool and run it into the ground? Maybe that is exactly what it’s like. A new hand tool that gets overused in the wrong fuel type because it’s new. And we don’t sharpen it and it gets dull and even less useful—even when it’s the right tool for the job.

Bear with me here, I’m going to run with this tool analogy.

AAR: Tool Analogy

Think about cache tools and specialty tools. The cache tools are really good for what they are. They serve their purpose, they’re good to learn with and we can always make do with them. But, as you dig more line and mop-up more ground you begin to figure out how to customize tools to be more efficient. That’s when we start building super Ps and pounders out of standard pulaskis, vipers out of Mcleods, rhinos out of shovels, and on and on and on. [\[Send me pictures and names of your custom tools—and, if appropriate, where the name came from!\]](#)

Even if you have a whole variety of specialty tools, if you don’t know what the end state of the mission is, you will likely misuse the tool. Are you trying to hold surface fire in needle cast or crown fire through manzanita on steep slopes? You have to know what you are trying to accomplish to choose the right tool and tactics.

But put any tool—even the right tool in the right situation—in the hands of someone who doesn’t know how to use it, or even what it’s designed for . . . Well, we have all seen that: Wasted Effort.

What are AARs Designed For?

This is the situation I think we are in with AARs. We have forgotten what they are designed for.

So, what *are* they designed for? [Check out this video:](#)

“If you didn’t improve, you were going to get your head handed to you the next day by the bad guys.”



The AAR is about tomorrow’s shift (or whenever the next operation is). Did you get that? Not today: TOMORROW. Yes, you need to talk about today, but it’s just the context for what improvements will be implemented in the future.

I have been to way too many AARs where this element is not provided the focus it deserves—or it is completely left out! When there is no plan to implement the discovered improvements, what’s the point?

Improve the Next Operation

When AARs first made their way into the wildland fire service we were so excited about the concept, we went wild with it.

We pushed AARs hard and started doing them after every operational period. Just getting together and talking after every shift was so new it made us question: “Why are we doing this?”

Asking that question gets us to the intent: Improve the next operation. While we have gotten really good at making AARs part of the daily routine, some of us have stopped asking the question: “Why are we doing this?” [\[Continued on Page 4\]](#)



Photo by Eric Panebaker, Price Valley Heli-Rappellers



Photo by Kari Greer

**When there is no plan
to implement the discovered
improvements, what's
the point?**

[Continued from Page 3]

For lots of folks it has become just one of the many things you have to do at the end of shift—water up, clean and sharpen the saw, toss your lunch trash, write down your hours, AAR. That's a good thing, but not if we aren't getting anything out of it.

Customize the Format

OK, back to the tool analogy.

Remember the part about learning with the cache tools and then figuring out exactly what you need and building customized tools to be more efficient? We are at that point with the standard AAR format. We know how to use the format in the IRPG, but we use AARs in so many different situations, we need to customize the format to suit a variety of conditions.

Think about it. With a little experience, you roll up to a fire, you look at the conditions and what you are being asked to do. You quickly decide the tool compliment you need to get the job done. Is it wet line and a torch (short grass with a steady wind)? Or, is it pick-tools and rakes (needle cast in the rocks)? The point is, you don't always use the same tools. To be efficient, you use the right tool for the conditions. Why should AARs be any different?

Know the intent and customize the format to your needs. The intent part is easy. Get some dialogue going about today to improve the next operation—including what worked well. The method you use to get there should be adjusted to fit the circumstances. Just like your tool selection.

Bottom Line:

- ❖ Know why you're doing an AAR (*improve the next operation*).
- ❖ Identify concrete actions (*tag the mix vs. straight gas cans*); consider assigning the task.
- ❖ During briefing (the next operation), reference points from the previous AAR.
- ❖ Have different formats for different circumstances (*specialty tools*).
- ❖ Practice all your formats (*use Tactical Decision Games/Sand Table Exercises to practice*).

Remember, you don't have to be leading the AAR or briefing to influence it, just ask the right questions.



Photo by Alpine Hotshots

More Info on AARs

For more insights, tips, and options regarding AARs, see pages 5 and 6.

Shop Talk

AAR Insights and Tips

Timing

- ✓ Do you do your AAR at the end of a long shift? Why not run your AAR at the beginning of the next shift rather than at the end of that long, exhausting one? Make it a pre-briefing.
- ✓ Consider doing the AAR in the middle of your shift. Yes, *during* the action! This allows for beneficial, real-time adjustments.

Audience/Participants

- ✓ For an effective AAR, how many people/participants are too many?
 - Are there times when you should intentionally limit your AAR audience?
 - Can too many folks in an AAR make it ineffective/useless?
 - On the other hand, can too few folks diminish the overall number of perspectives and the amount of quality input?
- ✓ For large AARs (Division; Prescribed Fire), have the functional areas (Engine Crew Leaders; Task Force Leaders; Firing Team Leaders; etc.) do AARs before the large group AAR. Then designate a spokesperson from each area. This allows folks to speak up from each of these smaller groups—whose key points are then reported to the larger group. This process also allows folks to get to their issues sooner.

Tactics

- ✓ At the beginning of the shift, assign someone to run the AAR at the end of the shift.
- ✓ As the leader, are you in the best position to run the AAR?
 - Consider using trainees to run your AAR! From the FFT1/ICT5 level all the way to ICT1, these folks must conduct AARs as part of completing position task books.
- ✓ Take notes during your AARs! Refer to these notes at end of project, assignment, or season.



More AAR Format Options

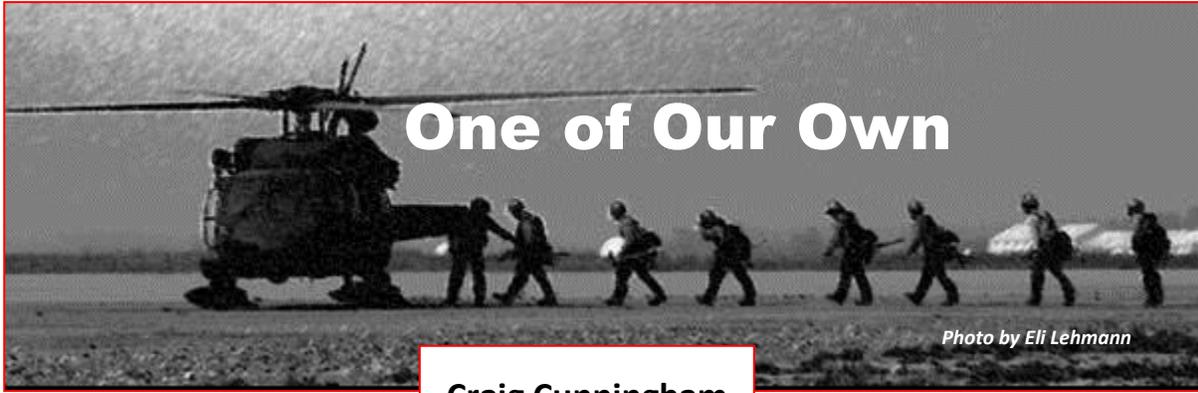
- ✓ **What?** (*What happened today?*) **So What?** (*What's it mean?*) **Now What?** (*What are we going to do about it?*)
- ✓ The One-Question AAR: **"What did you learn today?"** (A fact? A process? A need?)
- ✓ The Two-Question AAR: **"1. What did you learn today? 2. What will you commit to doing tomorrow?"** (Use this in briefing for next shift.)
- ✓ **"PLOWS"** (see next page)

After the AAR

- ✓ Remember, **ACTION** is a key part of the AAR. It's about applying what you learned to: the next day, operation, assignment, or season. Without that application, you're just talking. Without that **action**, there's no change in behavior.
- ✓ At the end of the year, compile your AAR notes. What keeps coming up? Use these notes to help refine SOGs and SOPs.

**Is there something you'd like to add to this AAR toolbox?
Please let us know!**

Or, if you have any other ideas for the next **Shop Talk**, please contact:
Paul Keller prkeller@fs.fed.us
503-622-4861



Craig Cunningham

Providing Us an Effective Alternative to Traditional AARs

By Alex Viktora

It was on Division Z on the Cooper Fire on the Kaibab National Forest this past August that I first had the chance to ask the question: *What do you folks think about AARs?*

Over the next few days I was able to ask this same question a few more times to different folks on different pieces of dirt. The answers were always similar: *“AARs don’t work like they used to”* and *“We need a new way to do and use the AAR”*.



Craig Cunningham receives the 2012 National Wildland Fire Safety Award presented annually for outstanding leadership and service in wildland fire safety within the Bureau of Land Management.

The reason for asking this question was simple. We’ve long suspected that folks on the line have grown tired of the standard AAR. The folks that I chatted with confirmed some universal suspicions: AARs are broken, or at least they’re due for a serious tune-up.

So, what should we do? It turns out, a few folks have started modifying not only the structure of AARs, but how and when the AAR is used.

PLOWS to the Rescue
One example of this type of innovation is the “PLOWS” AAR (see sidebar). Craig Cunningham, Acting Superintendent of the Ruby Mountain Hotshots, is the driving force behind this new AAR format.

[Continued on Page 7]



P.L.O.W.S. is an alternative to the standard After Action Review that emphasizes safety in a learning environment. Using P.L.O.W. S., 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?

LEADERSIP

- ✓ 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?

[Continued from Page 6]

A native of Elko, Nev., Craig has been on the Ruby Mountain IHC since its inception in 2001. (He moved from Assistant Superintendent to Acting Superintendent in early November this year.)

I recently contacted Craig to learn more about how PLOWS came about and how his crew uses this process. But first, I asked him to describe how Ruby Mountain had been using the standard AAR.

“Ever since I can remember, we always do a debriefing at the end of the shift. Those, typically, aren’t super in-depth. They’re just, you know, a five to ten-minute deal to cover what happened during the day. So they’re not as formal, but I guess they pose an opportunity to state concerns or ask questions. If we had something bigger, we would do a more official AAR.

“I think in 2009 or 2010 we started doing an actual AAR for every fire or every shift of significance. So we were going on multiple fires and we’d have between five and ten shifts of significance throughout the season. If you do the math, we ended up with 20 to 30 official, more in-depth, AARs in a season.”

Standard AAR Process Needed to Change

At some point in early 2011, it became clear to Craig and his supervisor, Gabe Donaldson, then Ruby Mountain Hotshot Crew Superintendent, that something with the standard AAR process might need to change.

“We were driving home from a fire somewhere in Idaho,” Craig recalls.

“Gabe and I were talking about how we could make it [the AAR] better because we knew we had to come home and do two or three of them. We were like, OK, what can we do? I kept thinking and came up with the mnemonic and started testing it out.”



Craig Cunningham on the line. His new PLOWS approach to the standard AAR format allows participants to review the plan, leadership, obstacles, weaknesses, and strengths.

“I kept thinking and came up with the mnemonic and started testing it out.”

Craig Cunningham

On his first steps at developing “PLOWS”



How is PLOWS Working?

“It’s working well,” Craig assures. “We get a lot more participation utilizing PLOWS. And occasionally, we’ll still do the old format just to break it up—anything can be boring. But PLOWS seems to work a lot better. The way it’s laid out, it allows us to drive the AAR. And it still goes off of the principles that are in the IRPG—as far as facilitating it and ending on a good note.”

Craig believes that, because of PLOWS, there’s been noticeable positive changes on his crew.

“It’s been evident in changing little things on the crew. And we don’t have those problems repeating themselves,” he informs.

In addition, Craig notes that the results of all the AARs—PLOWS as well as traditional AARs—influence more than just the “little things.” All of the crew’s AARs are a critical component of Ruby Mountain’s planning efforts at the beginning of a new fire season.

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Craig Cunningham says that because of PLOWS’ format, this new system is better at allowing his Ruby Mountain Hotshot Crew—seen here on the 2012 Del Fire—to drive the AAR. He confirms that because of PLOWS there have been noticeable positive changes on his crew.



Real-World Example:

PLOWS Format Helps Apply Lessons from a Challenging Shift to Very Next Operation

The Thompson Ridge Fire, that burned nearly 24,000 acres in the southwest last season, was like many fires that occurred in 2013—with at least one notable exception.

After a series of coordinated and challenging burnout operations—which resulted in several close-calls—firefighters clamored to talk about the operations. Incident Commander Bea Day supported this desire to talk over the operations and called for an evening AAR.

The facilitator of the AAR, Travis Dotson of the Wildland Fire Lessons Learned Center, was concerned with how to make this work. “When Bea asked if I could run this AAR, I knew I’d have to do two things: Use the right AAR format for the situation and focus on the next firing operation,” Dotson explains.

“We’re talking two entire divisions, maybe 150 firefighters participating. I started off by saying something we’ve all felt: AAR’s are broken. I’d seen the PLOWS format floating around and decided that this approach might help keep everyone engaged,” Dotson recalls. “Folks really gravitated to describing previous ‘Obstacles’ and were able to translate that into a plan for improvements.” [“Obstacles” is one of the five elements in PLOWS—see sidebar box on page 6.] “The opportunity to immediately apply lessons from a challenging shift to the very next operation was the key,” points out Dotson.

“The PLOWS format really helped us get there.”

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“Probably the most notable thing is that in the beginning of the year, the overhead come up with goals for the season. And a lot of the goals are derived from the end of season AAR from the prior year.”

**“And if it works for you
then pass it on to others
so that everybody
can benefit from it.”**

Great Advice

If you’re thinking about trying a new AAR format—maybe PLOWS, or something similar—Craig’s got some great advice for you.

**Got a potential
“One of Our Own”
candidate?
Please let us know.
Contact: Paul Keller
503-622-4861
prkeller@fs.fed.us**

“You’ve got to try new formats and be willing to try something new. At first, it may not be the best thing, but you may get something different

out of it by trying your new approach. And if it works for you, then continue as is. If it doesn’t, then find something that’s better that works for you—or fix what’s wrong.”

Craig’s—spot on—final recommendation: “And if it works for you then pass it on to others so that everybody can benefit from it.”



Craig Cunningham (above), Acting Superintendent of the Ruby Mountain Hotshots, and one of his crew’s sawyers on the 2012 Mustang Fire.



Your **FEEDBACK**



Readers Respond to Our [Summer Issue](#)

Dedicated to the Granite Mountain Hotshots

A great issue celebrating the lives of the Granite Mountain Hotshots. Travis was right on the money in his "Ground Truths" article. Everyone feels like "tipping cars over" and will for some time!

Early in my career, I had the great fortune to work as a shot on several crews. This one, along with South Canyon and Esperanza, hurt to the core.

Thanks for doing what you guys at the Lessons Learned Center do to support the fire community.

Doug Elliott, former Arrowhead IHC and Sierra IHC member; current SOF2 on the Southern California Interagency IMT #3

I wanted to say thank you for what you, the *Two More Chains* staff, do. I truly appreciate it. And a special thanks to Travis for baring his soul to us all. Thank you, Travis.

In reading the biographies of the [Granite Mountain] crew, two things stand out to me: Passion and Compassion. Passion in their life and work, and Compassion for their fellow human beings.

Kent D. Miller, Wildlife Technician
Brush Creek-Hayden Ranger District
Medicine Bow-Routt NFs and Thunder Basin NG

The loss of firefighters continues to haunt all of us, with new tragedies reminding us of past tragedies. Your group is very important in reminding us about the hazards of the business of firefighting and providing solutions to stay safe.

Stay the course.

Rick Smedley, (retired) Northwest Regional Fire Planner, National Park Service

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<http://bit.ly/2morechains>

Leadership in Action

[Editor's Note: We asked FMO Ed Hiatt if we could share this excerpted email piece that he sent out to his folks with a link to the Spring [Two More Chains](#) issue right after it hit the streets. Thank You, Ed, for letting us post your good words here.]

I want all of you to share this with your crews and give them some time to read this edition of *Two More Chains*. Pay particular attention to the cover story's "Leadership" section and watch the video from the Palomar IHC in the "One of Our Own" article:

[\[http://www.youtube.com/watch?v=umW7JC4lWDs&feature=share&list=PL1F04BABD646F982D\]](http://www.youtube.com/watch?v=umW7JC4lWDs&feature=share&list=PL1F04BABD646F982D).

When you watch the video, be prepared to discuss this section within your crews. Do so as soon as possible. Take it seriously. This video gives very clear narrative on Leader's Intent and how we should all proceed with or without it.

We've talked about giving our resources that chance to build and develop as leaders, here is a great example.

Here's another Leader's Intent video. Click it or paste it into your address bar:

[\[http://www.youtube.com/watch?v=xBlyU8zQOnc&list=PL1F04BABD646F982D\]](http://www.youtube.com/watch?v=xBlyU8zQOnc&list=PL1F04BABD646F982D).

Edward R. Hiatt

North Zone Fire Management Officer
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and North Kaibab Ranger District, Kaibab National Forest

Two More Chains, published quarterly by the Wildland Fire Lessons Learned Center, is dedicated to sharing information with wildland firefighters. For story tips, questions, or comments, please contact: Paul Keller, prkeller@fs.fed.us, 503-622-4861.



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